SHARP

SERVICE MANUAL

SE00LC26GA500
Issued: 24th Feb. 2005

LCD COLOUR TELEVISION

PAL B/G, D/K, I / SECAM L/L' SYSTEM COLOUR TELEVISION

MODEL
LC-26GA5E E/F/I/K/RU
LC-32GA5E E/F/I/K/RU

In the interests of user safety (required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.

SERVICE MANUAL UPDATE LOG SHEET

Technical Report No. Technical Bulletin No.	Cause / Solution	Part No.	Page No.	Application Data /Serial No.

Use this page to keep any special servicing information as Technical Report (Bulletin), Technical Information, etc.
If only part number changes are required, just change part number directly the part number in the Parts Listing Section.
If you need more information, please refer to the Technical Report (Bulletin).

ELECTRICAL SPECIFICATIONS

Item			**26″ LCD COLOUR TV, Model: LC-26GA5E**	**32″ LCD COLOUR TV, Model: LC-32GA5E**	
LCD panel			26″ Advanced Super View & BLACK TFT LCD	32″ Advanced Super View & BLACK TFT LCD	
Number of dots			3,147,264 dots (1366 × 768 × 3 dots)		
Video Colour System			PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60		
TV Function	TV-Standard (CCIR)		B/G, I, D/K, L, L’		
	Receiving Channel	VHF/UHF	E2–E69ch, F2–F10ch, I21–I69ch, IR A–IR Jch		
		CATV	Hyper-band, S1–S41ch		
	TV-Tuning System		Auto Preset 99 ch, Auto Label, Auto Sort		
	STEREO/BILINGUAL		NICAM/A2		
FM RADIO Function	Receiving Frequency:		87.5-108 MHz		
	Receiving Channel:		1–40 CH		
Brightness			450 cd/m^2		
Backlight life			60,000 hours (at Backlight Standard position)		
Viewing angles			H : 170° V : 170°		
Audio amplifier			10W × 2		
Speakers			Ø 8 cm 2pcs		
Terminals	Rear	ANTENNA IN	UHF/VHF 75 Ω Din type		
		FM Radio in	Din type		
		EXT 1	SCART (AV input/output, RGB input, TV output)		
		EXT 2	SCART (AV input/output, Y/C input, AV Link)		
		EXT 3	S-VIDEO (Y/C input), RCA pin (AV input)		
		EXT 4	RCA pin (component input)		
		PC INPUT	D-sub 15 pin (ANALOG RGB), Ø 3.5 mm Jack (Audio Input)		
		AV OUTPUT	RCA pin (Variable/Fixed)		
		Headphones	Ø 3.5mm jack (Audio output)		
OSD language			English/German/French/Italian/Spanish/Dutch/Swedish/Portuguese/Finnish/Turkish/Greek/Russian/Polish		
Power Requirement			AC 220–240 V, 50/60 Hz	AC 220–240 V, 50/60 Hz	
Power Consumption			115 W (0.95 W Standby) (Method IEC60107)	135 W (0.95 W Standby) (Method IEC60107)	
Weight			12 kg (Display only), 15 kg (Display with stand)	15.5 kg (Display only), 19.5 kg (Display with stand)	

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

NOTE

- Refer to inside back cover for dimensional drawings.

IMPORTANT SERVICE SAFETY PRECAUTION

Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE
F701 (LC-26GA5E: 3.15A, 250V. LC-32GA5E: 4A, 250V), F702 (LC-26GA5E: 3.15A, 250V. LC-32GA5E: 4A, 250V), F703 (2A, 250V), F704 (2A, 250V), F705 (1A).

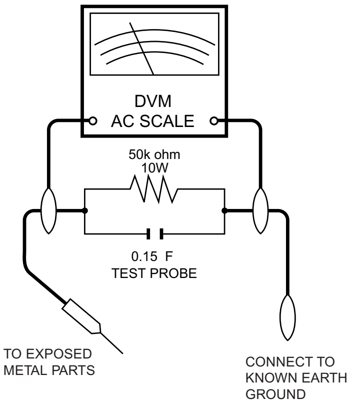
BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 110~240 volt AC outlet, and connect the DC power cable into the receiver's DC jack. (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 50k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)
Any reading of 0.75V peak (this corresponds to 0.5 mA. peak AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD television have special safety-related characteristics.
These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠ " and shaded areas in the **Replacement Parts Lists and Schematic Diagrams.**
For continued protection, replacement parts must be identical to those used in the original circuit.
The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

PRECAUTIONS FOR USING LEAD-FREE SOLDER

1 Employing lead-free solder

“ALL PWB” of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.
Example:

LFa
Sn-Ag-Cu

Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.
As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3 Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.
Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.
If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.
When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing.

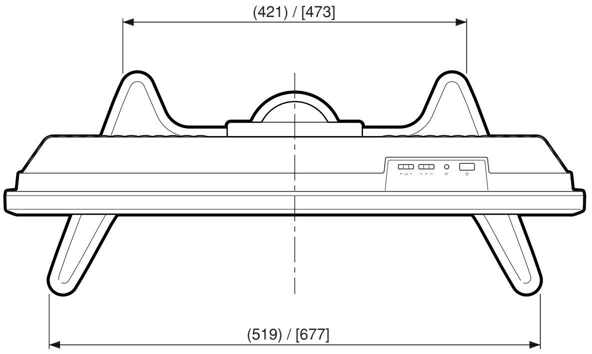
Part No.	★	Description	Code
ZHNDAi123250E	J	ϕ0.3mm 250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm 500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm 1kg(1roll)	BM

DIMENSIONS

LC-26/32GA5E

( ) : LC-26GA5E
[ ] : LC-32GA5E

▨ : LC-26/32 GA5E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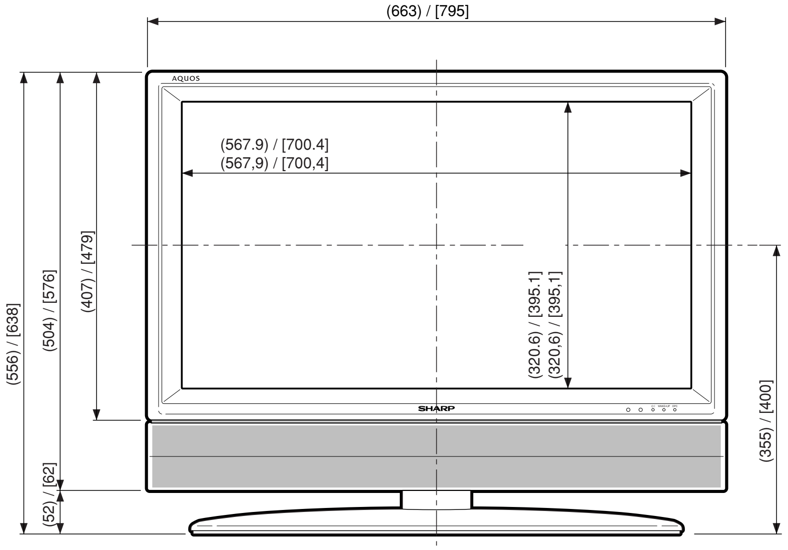
(519) / [677]


(663) / [795]
AQUOS
(567.9) / [700.4]
(567,9) / [700,4]
(556) / [638]
(504) / [576]
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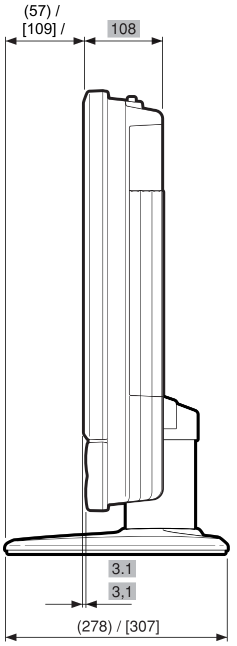
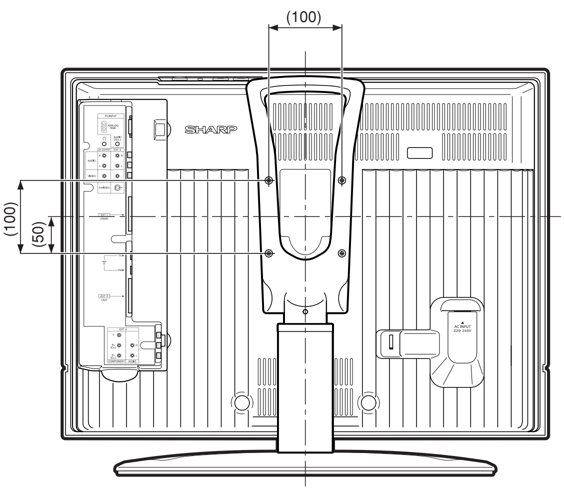
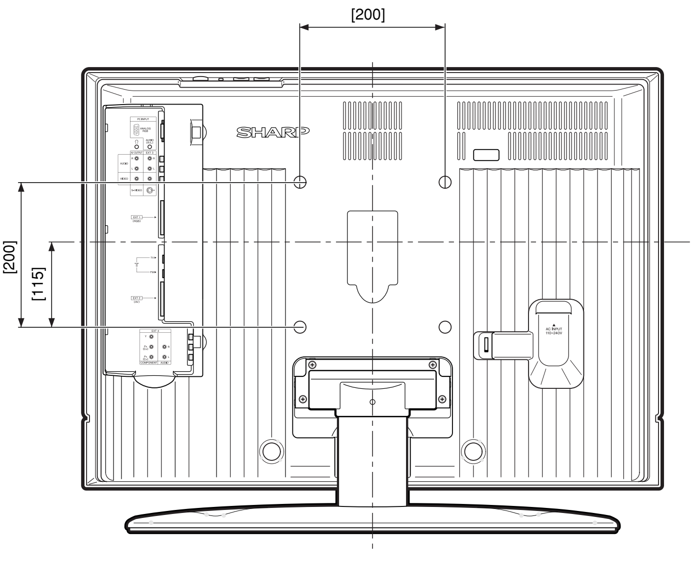
(320.6) / [395.1]
(320,6) / [395,1]
SHARP
(355) / [400]
(52) / [62]


(57) /
[109] /
108
3.1
3,1
(278) / [307]

LC-26GA5E


(100)
(100)
(50)
SHARP

LC-32GA5E


[200]
[200]
[115]
SHARP

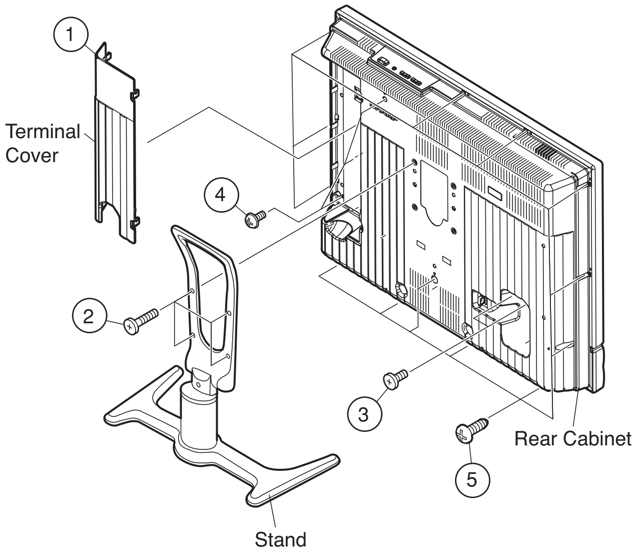
REMOVING OF MAJOR PARTS

(LC-26GA5E)

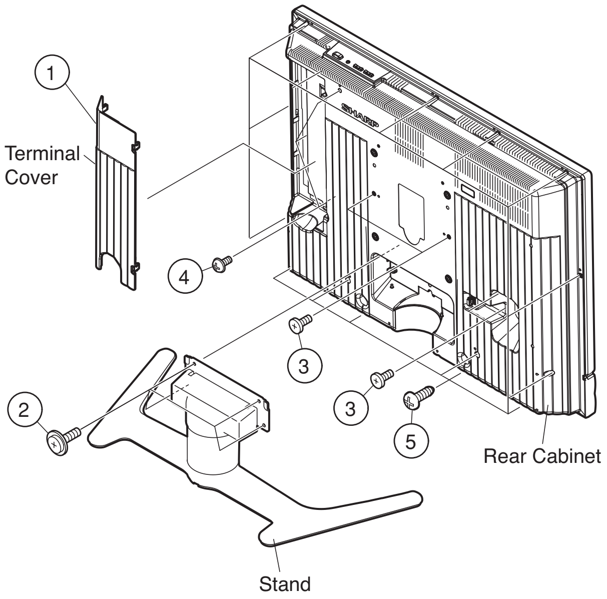
1. Remove the Terminal Cover ① .
2. Remove the 4 lock screws ② and detach the Stand.
3. Remove the 2 lock screws ③ and the 3 lock screws ④.
4. Remove the 13 lock screws ⑤ from the Rear Cabinet, and detach the Rear Cabinet.

(LC-32GA5E)

1. Remove the Terminal Cover ① .
2. Remove the 4 lock screws ② and detach the Stand.
3. Remove the 4 lock screws ③ and the 3 lock screws ④.
4. Remove the 15 lock screws ⑤ from the Rear Cabinet, and detach the Rear Cabinet.

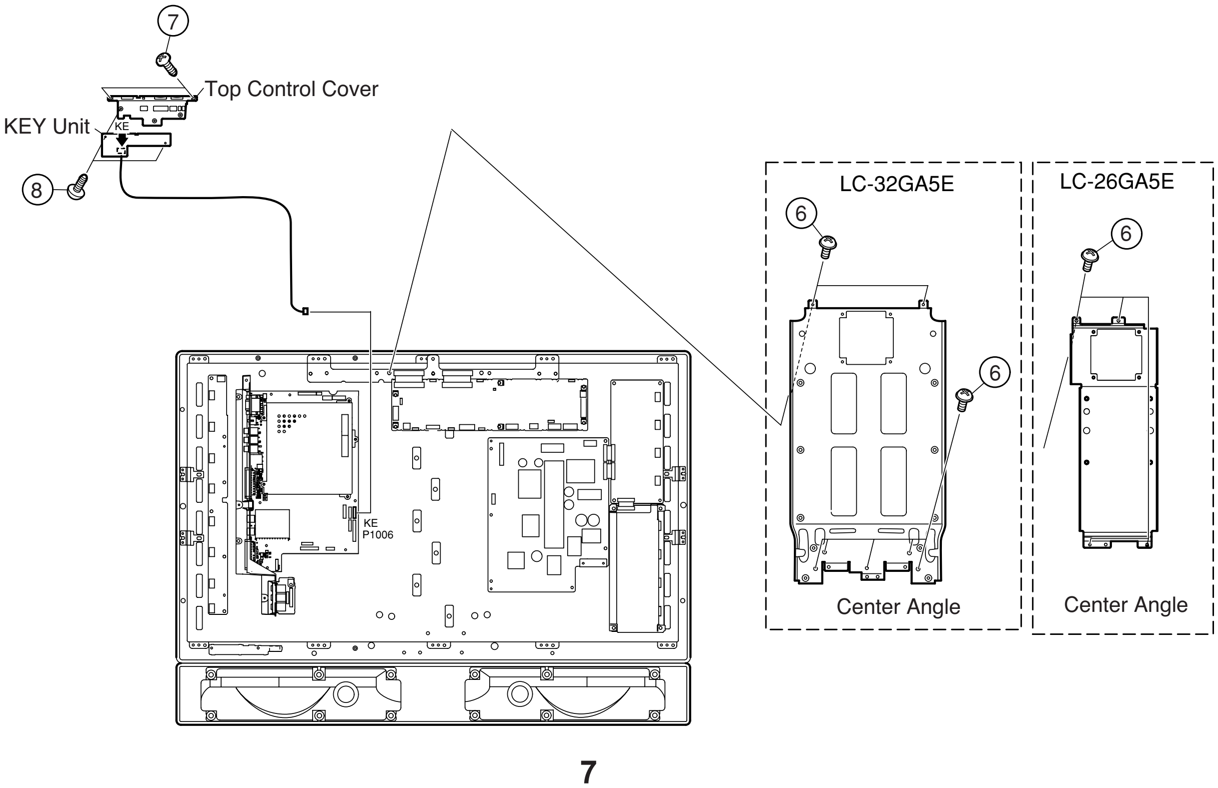

1
Terminal Cover
4
2
3
Rear Cabinet
5
Stand

(LC-26GA5E)

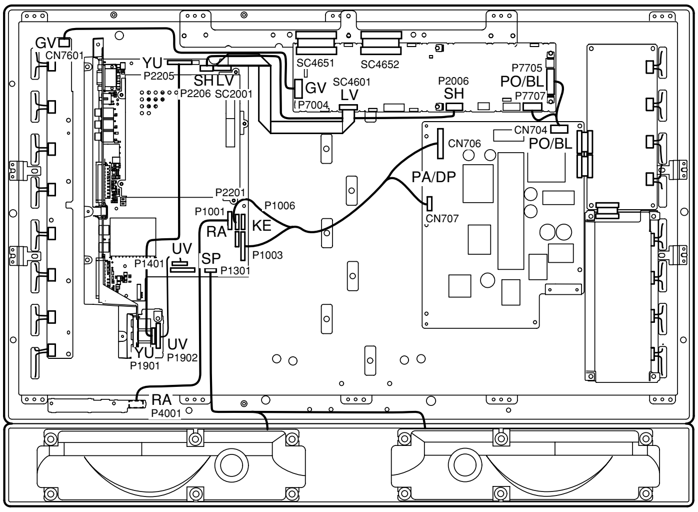

1
Terminal Cover
4
3
2
3
5
Rear Cabinet
Stand

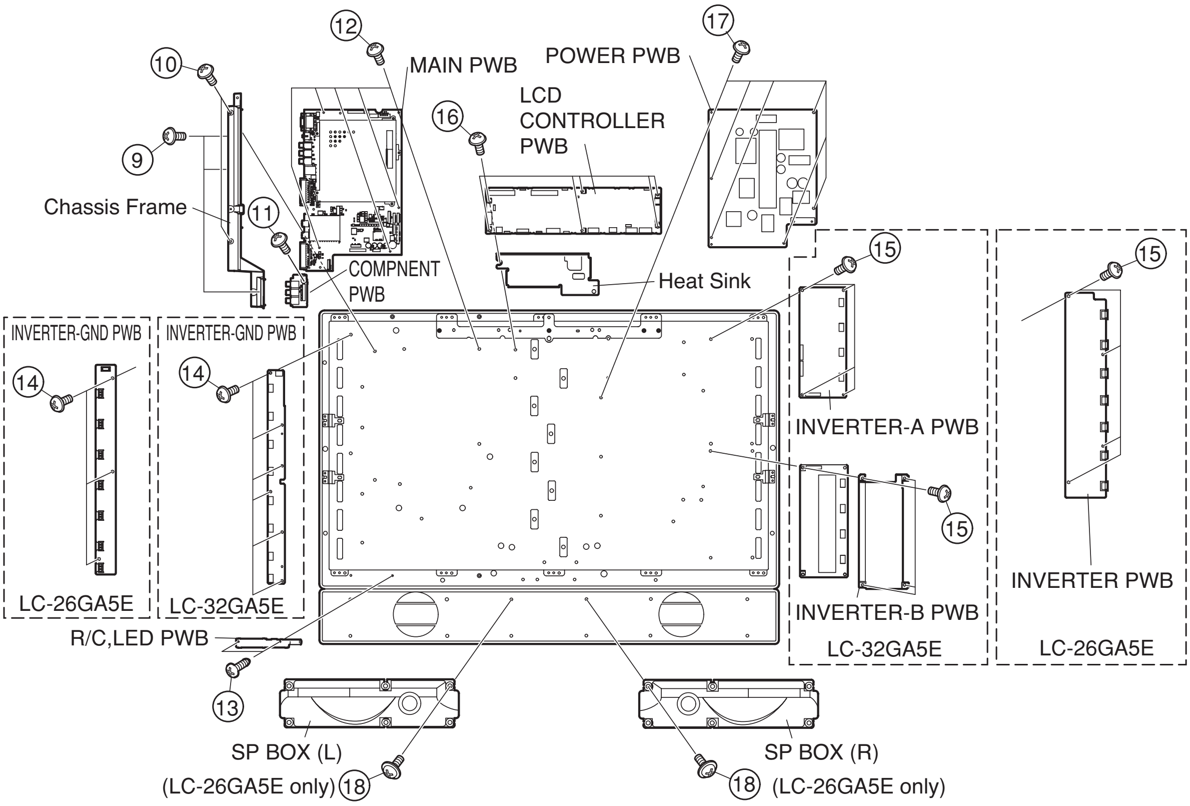
(LC-32GA5E)

5. Remove the 4 (LC-26GA5E) / 7 (LC-32GA5E) lock screws ⑥ and detach the Center Angle.
6. Remove the KEY Unit.
   6-1. Remove the 2 lock screws ⑦ from the Top Control Cover.
   6-2. Remove the 2 lock screws ⑧ from the KEY Unit.

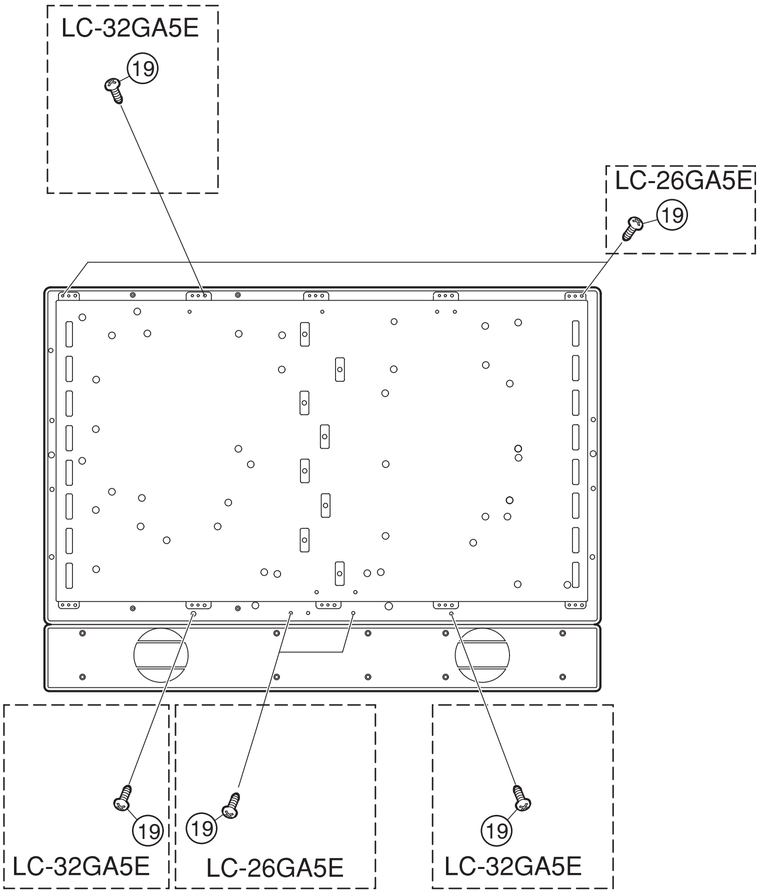

7
Top Control Cover
KEY Unit
KE
8
KE
P1006
LC-32GA5E
6
6
Center Angle
LC-26GA5E
6
Center Angle

7. Disconnect all the connectors from all the PWBs.
8. Remove the MAIN and COMPONENT PWBs.
    8-1. Remove the 3 lock screws ⑨ and the 2 lock screws ⑩. Detach the Chassis Frame.
    8-2. Remove the 1 lock screw ⑪ and detach the COMPONENT PWB.
    8-3. Remove the 5 lock screws ⑫ and detach the MAIN PWB.
9. Remove the 2 lock screws ⑬ and detach the R/C,LED PWB
10. Remove the 3 (LC-26GA5E) / 6 (LC-32GA5E) lock screws ⑭ and detach the INVERTER GND PWB.
11. LC-26GA5E : Remove the 4 lock screws ⑮ and detach the INVERTER PWB.
    LC-32GA5E : Remove the 8 lock screws ⑮ and detach the INVERTER-A and INVERTER-B PWBs.
12. Remove the 6 lock screws ⑯ and detach the LCD CONTROLLER PWB and Heat Sink.
13. Remove the 6 lock screws ⑰ and detach the POWER PWB.
14. Remove the 2 lock screws ⑱ and detach theSP BOX (L) and (R). (LC-26GA5E only)


GV
CN7601
YU
P2205
SH
LV
P2206
SC2001
SC4651
SC4652
GV
P7004
SC4601
LV
P2006
SH
P7705
PO/BL
P7707
CN704
CN706
PO/BL
PA/DP
P2201
P1001
P1006
RA
KE
CN707
UV
SP
P1401
P1301
P1003
UV
YU
P1902
P1901
RA
P4001

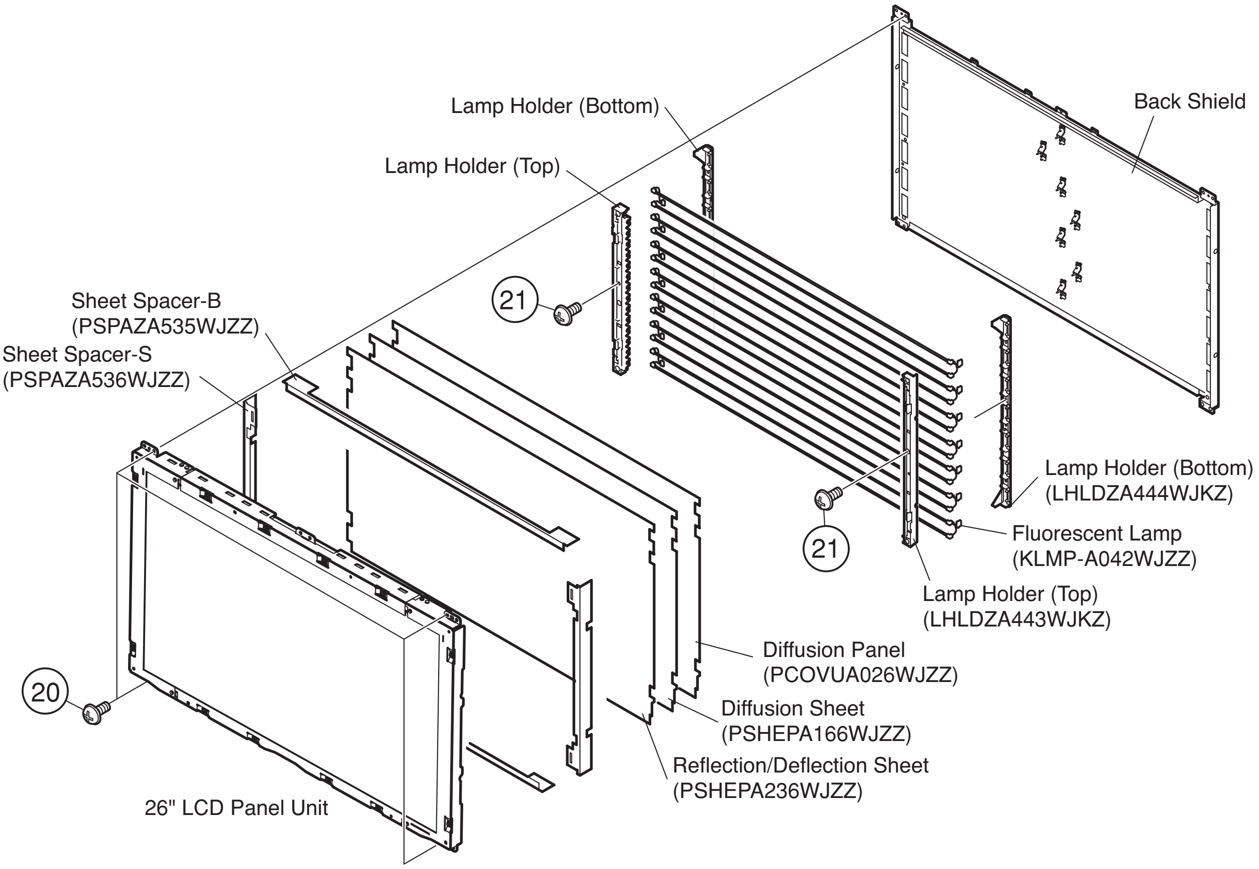

⑫
⑰
⑩
MAIN PWB
POWER PWB
LCD CONTROLLER PWB
⑯
⑨
Chassis Frame
⑪
COMPNENT PWB
Heat Sink
⑮
⑮
INVERTER-GND PWB
INVERTER-GND PWB
⑭
⑭
INVERTER-A PWB
⑮
INVERTER PWB
INVERTER-B PWB
LC-26GA5E
LC-32GA5E
LC-32GA5E
LC-26GA5E
R/C,LED PWB
⑬
SP BOX (L)
(LC-26GA5E only) ⑱
SP BOX (R)
⑱ (LC-26GA5E only)

15. Remove the 4 (LC-26GA5E) / 3 (LC-32GA5E) lock screws ⑲ from the LCD panel unit ass’y, and detach the LCD panel unit ass’y.


LC-32GA5E
19
LC-26GA5E
19
19
19
19
LC-32GA5E
LC-26GA5E
LC-32GA5E

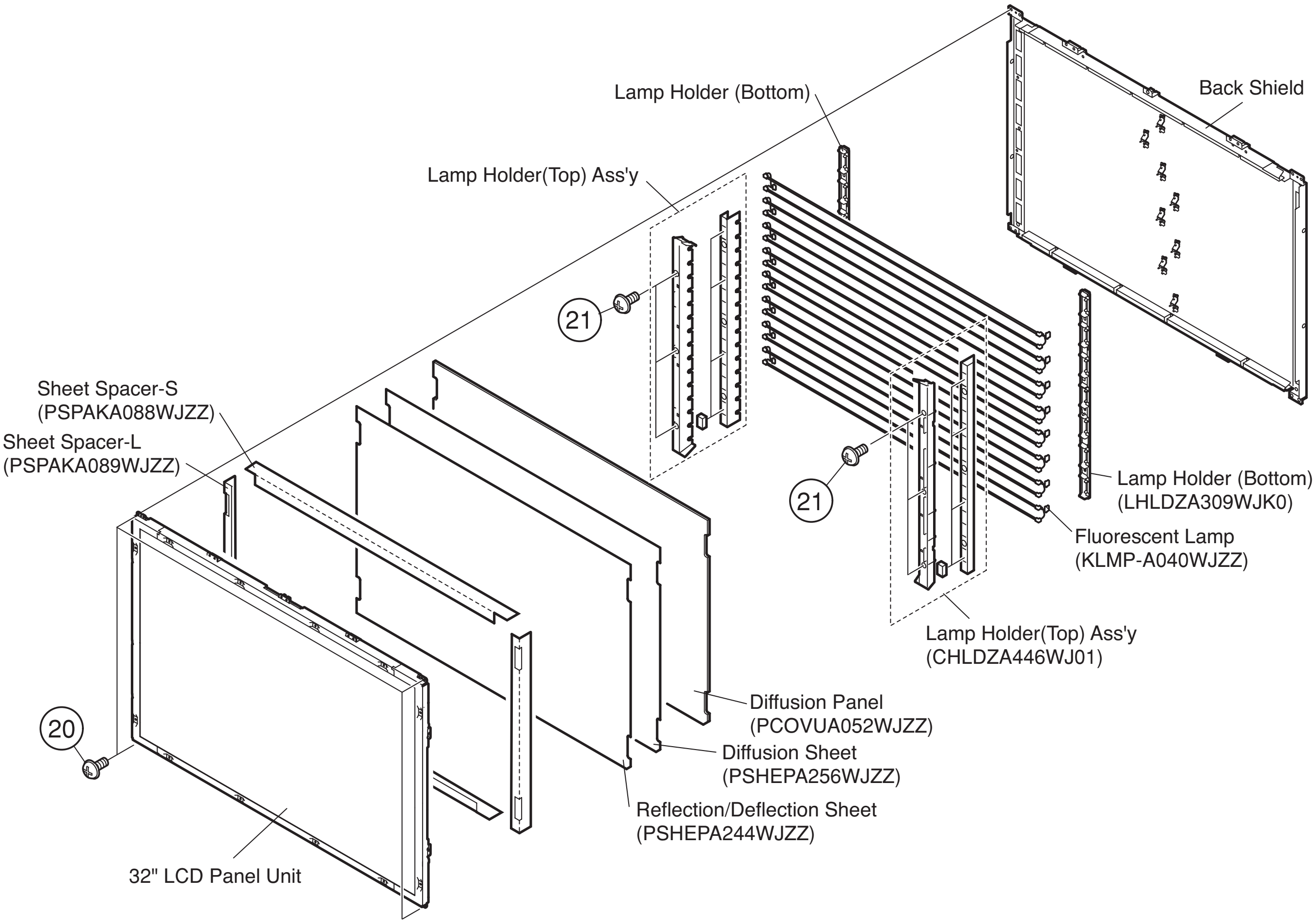
(LC-26GA5E)

16. Remove the 4 lock screws ⑳ from the 26" LCD Panel Unit, and detach the 26" LCD Panel Unit.
17. Detach the sheet spacer 1 and sheet spacer 2.
18. Detach the Diffusion and Reflection/Deflection Sheets and Diffusion Panel.
19. Remove the 6 lock screws ㉑ from the Lamp Holder (top), and detach the Lamp Holer (top).
20. Remove the Fluorescent Lamps.


Lamp Holder (Bottom)
Back Shield
Lamp Holder (Top)
21
Sheet Spacer-B
(PSPAZA535WJZZ)
Sheet Spacer-S
(PSPAZA536WJZZ)
Lamp Holder (Bottom)
(LHLDZA444WJKZ)
Fluorescent Lamp
(KLMP-A042WJZZ)
21
Lamp Holder (Top)
(LHLDZA443WJKZ)
Diffusion Panel
(PCOVUA026WJZZ)
20
Diffusion Sheet
(PSHEPA166WJZZ)
Reflection/Deflection Sheet
(PSHEPA236WJZZ)
26" LCD Panel Unit

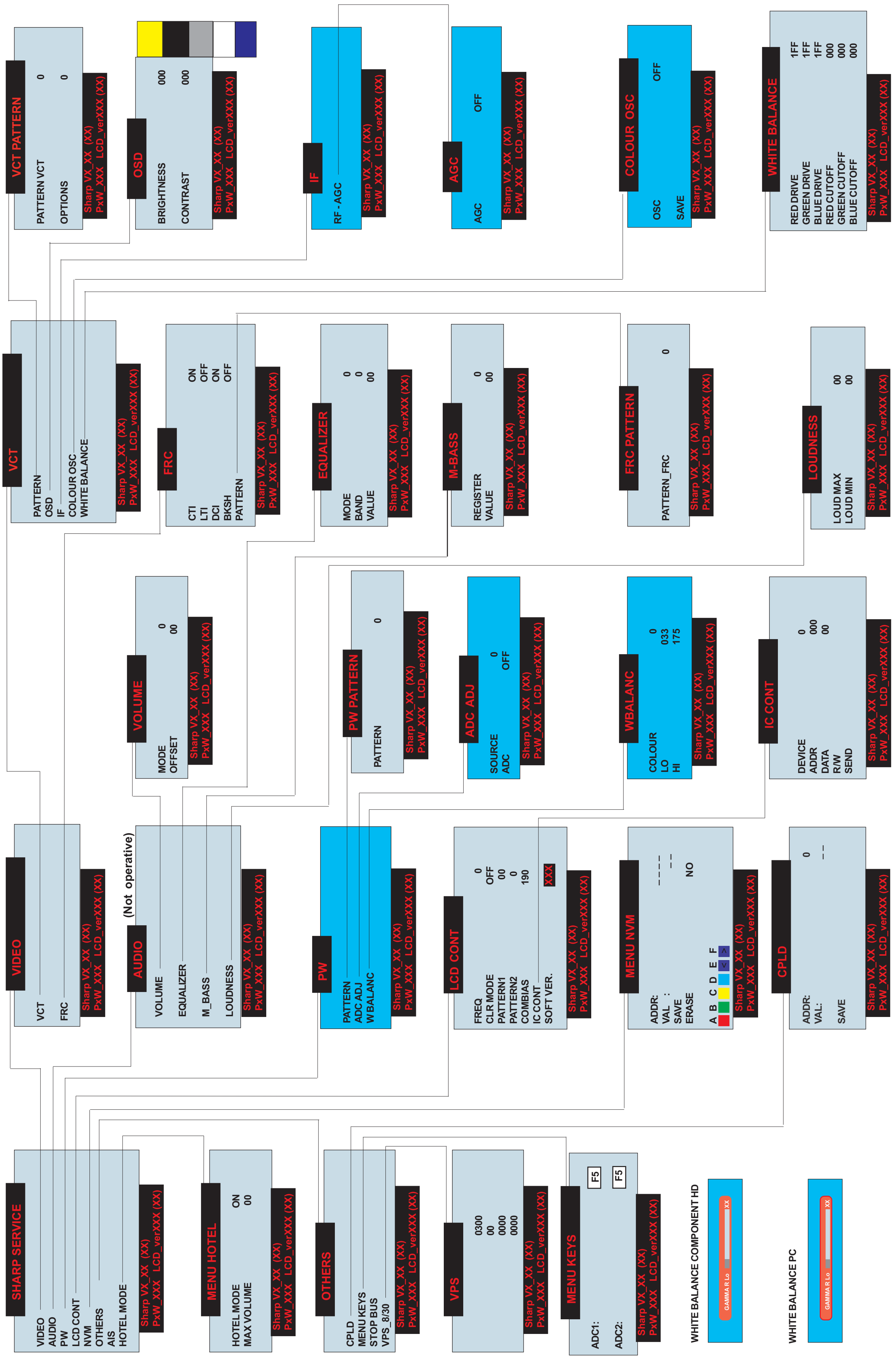
(LC-32GA5E)

16. Remove the 4 lock screws ⑳ from the 32" LCD Panel Unit, and detach the 32" LCD Panel Unit.
17. Detach the sheet spacer 1 and sheet spacer 2.
18. Detach the Diffusion and Reflection/Deflection Sheets and Diffusion Panel.
19. Remove the 6 lock screws ㉑ from the Lamp Holder (top) Ass'y, and detach the Lamp Holer (top) Ass'y.
20. Remove the Fluorescent Lamps.


Lamp Holder (Bottom)
Back Shield
Lamp Holder(Top) Ass'y
21
Sheet Spacer-S
(PSPAKA088WJZZ)
Sheet Spacer-L
(PSPAKA089WJZZ)
21
Lamp Holder (Bottom)
(LHLDZA309WJK0)
Fluorescent Lamp
(KLMP-A040WJZZ)
Lamp Holder(Top) Ass'y
(CHLDZA446WJ01)
Diffusion Panel
(PCOVUA052WJZZ)
20
Diffusion Sheet
(PSHEPA256WJZZ)
Reflection/Deflection Sheet
(PSHEPA244WJZZ)
32" LCD Panel Unit

SERVICE ADJUSTMENTS

Service Adjustments Menus


VCT PATTERN
PATTERN VCT 0
OPTIONS 0
OSD
BRIGHTNESS 000
CONTRAST 000
IF
RF - AGC
AGC
AGC OFF
COLOUR OSC
OSC OFF
SAVE
WHITE BALANCE
RED DRIVE 1FF
GREEN DRIVE 1FF
BLUE DRIVE 1FF
RED CUTOFF 000
GREEN CUTOFF 000
BLUE CUTOFF 000
VCT
PATTERN
OSD
IF
COLOUR OSC
WHITE BALANCE
FRC
CTI ON
LTI OFF
DCI ON
BKSH OFF
PATTERN
EQUALIZER
MODE 0
BAND 0
VALUE 00
M-BASS
REGISTER 0
VALUE 00
FRC PATTERN
PATTERN_FRC 0
LOUDNESS
LOUD MAX 00
LOUD MIN 00
VOLUME
MODE 0
OFFSET 00
PW PATTERN
PATTERN 0
ADC ADJ
SOURCE 0
ADC OFF
WBALANC
COLOUR 0
LO 033
HI 175
IC CONT
DEVICE 0
ADDR 000
DATA 00
R/W
SEND
VIDEO
VCT
FRC
AUDIO
(Not operative)
VOLUME
EQUALIZER
M_BASS
LOUDNESS
PW
PATTERN
ADC ADJ
WBALANC
LCD CONT
FREQ 0
CLR MODE OFF
PATTERN1 00
PATTERN2 00
COMBIAS 0
IC CONT 190
SOFT VER. XXX
MENU NVM
ADDR: - - - -
VAL : - -
SAVE
ERASE NO
A B C D E F
CPLD
ADDR: 0
VAL: - -
SAVE
SHARP SERVICE
VIDEO
AUDIO
PW
LCD CONT
NVM
OTHERS
AIS
HOTEL MODE
MENU HOTEL
HOTEL MODE ON
MAX VOLUME 00
OTHERS
CPLD
MENU KEYS
STOP BUS
VPS_8/30
VPS
0300
00
0000
0000
MENU KEYS
ADC1: F5
ADC2: F5
Sharp VX_XX_(XX)
PxW_XXX_LCD_verXXX (XX)
WHITE BALANCE COMPONENT HD
WHITE BALANCE PC
GAMMA R Lo XX

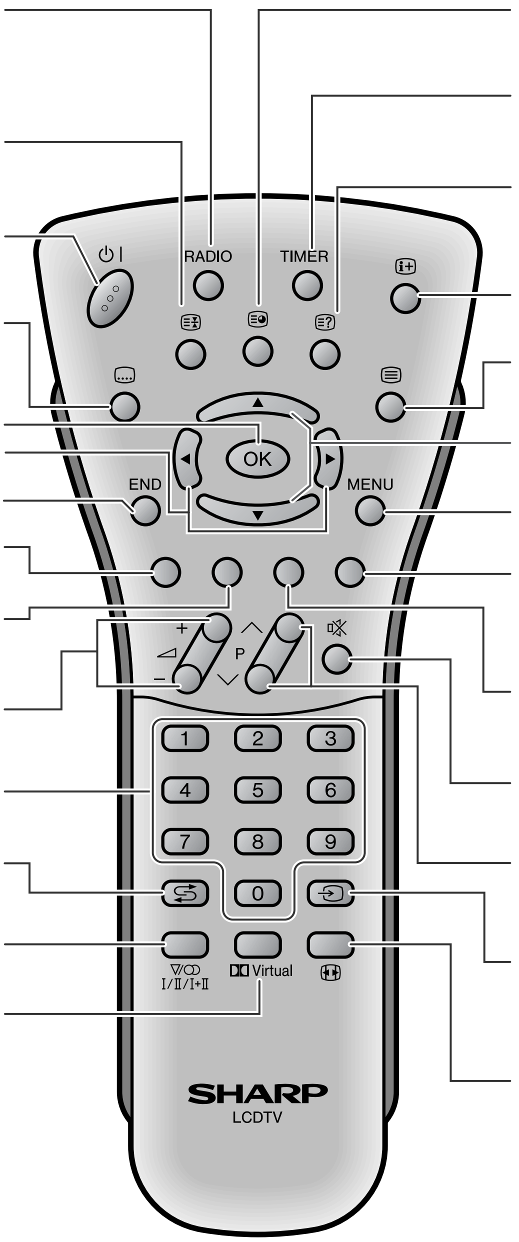
Adjustment Recommendations

The adjustment values are set to the optimum conditions at the factory before shipping. If a value should become improper or an adjustment is required due to part replacement, make an adjustment according to the following order:

1. AGC (IF Menu). Page 15.
2. Colour OSC. Page 16.
3. Common Bias. Page 19 (LCD CONT Menu - COMBIAS)
4. ADC. Page 18.
5. TV mode White Balance. Page 19 (WBALANC Menu).
6. HD Components White Balance. Page 22.
7. PC White Balance. Page 22.

NOTE: Do not change any other adjustment of those above listed, unless you have been advised to do so by a Sharp representative.

Remote Control Unit



RADIO
Displays the RADIO Menu screen and make adjustments for FM RADIO mode.

(≣ Hold)
Temporarily holds the current Teletext page.

⏻ | (Standby/On)
Turns on and off the power or enters standby mode.

▭ (Subtitle)
Displays the Teletext Subtitle directly.

OK

Volume and Right/Left Selection

END
Returns to normal screen.

Red
Displays the PICTURE LEVELS Menu directly.

Green
Displays the SOUND SPEAKER LEVELS Menu directly.

◿ (+)/(−) (Volume)
◿ (+) Increases the volume.
◿ (−) Decreases the volume.

Programme Select
Changes channels or sets the page in Teletext mode.

⇆ (Flashback)
Returns to the previous channel.

Sound
Select the sound multiplex mode.

DD Virtual
Displays the SOUND DOLBY EFFECTS Menu screen.

≣ (Subpage)
Displays the Teletext Subpage.

TIMER
Displays the FEATURE TIMERS Menu screen directly.

≣? (Reveal)
Displays hidden information such as solutions to riddles and puzzles in Teletext mode.

i+ (Display/Info)
Displays the programme information.

≣ (Teletext)
Displays the Teletext mode

Programmes list, Upwards/Downwards Selection

MENU
Displays the menu.

Blue
Teletext mode: Select a page.

Menu mode: MaKe some adjustments.

Yellow
Teletext mode: Select a page.

🔇 (Mute)
Switches the sound on and off.

P (∧)/(∨)
∧ Increases programme number.
∨ Decreases programme number.

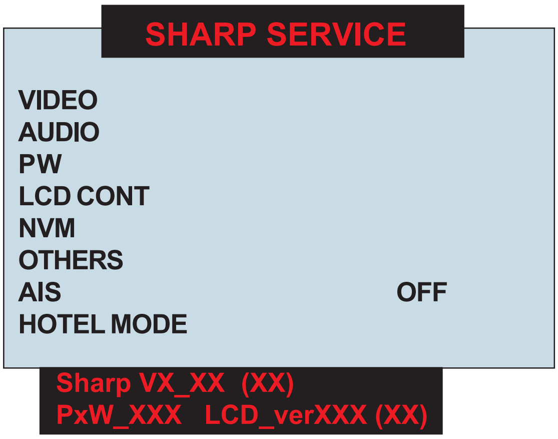
⇥ (Input mode)
Displays the input source between TV, EXT1, EXT2, EXT2 S-VIDEO, EXT3, EXT3 S-VHS, EXT4 and PC INPUT modes.

⊞ (WIDE mode)
Displays the WIDE MODES Menu screen directly, to select your desired screen size.
Sets the area of maginification in Teletext mode.

How to enter the Service Mode

The Service Mode is provided to enable the engineer to correctly set up the receiver.
Note that the value of these adjustments may vary from one receiver to another.

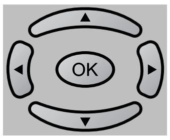
To enter the Service Mode, carry out the following procedure.
1. Connect a test pattern to the antenna terminal.
2. Tune the receiver to this signal.
3. Turn the receiver off using the mains switch.
4. Press volume down and channel up buttons on the top of the receiver at the same time.
5. Keeping these buttons pressed, turn the mains on.
6. Keep pressed the volume down and channel up buttons until the Service Mode On Screen Display (OSD) appears:



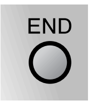
SHARP SERVICE

VIDEO
AUDIO
PW
LCD CONT
NVM
OTHERS
AIS OFF
HOTEL MODE

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up/down arrows imprinted on the ring of the R/C to select a line/term in the menu.
Confirm the selection with **OK** this will take you to the next menu.

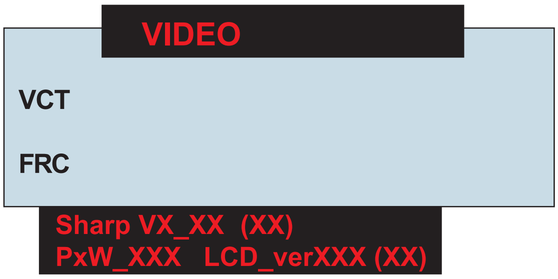


Press END button to exit of Service Menu.

AIS: Autoinstallation.

Video Menu

If you select the VIDEO option the next On Screen Display appear:

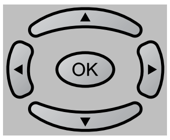


VIDEO

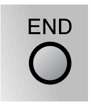
VCT

FRC

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

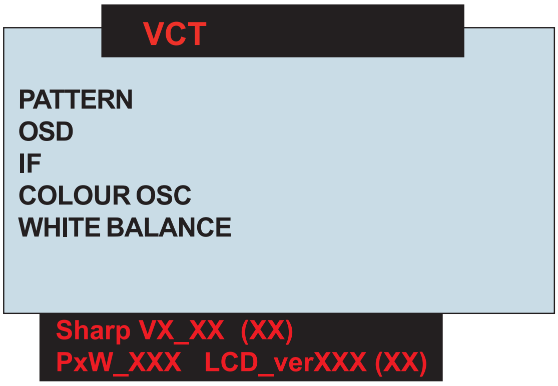


Use the up/down arrows to select a term in the menu.
Confirm the selection with **OK** this will take you to



Pressing END button the OSD returns to the previous menu.

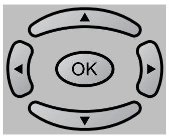
VCT Menu
To adjust parameters of VCT IC.



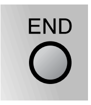
VCT

PATTERN
OSD
IF
COLOUR OSC
WHITE BALANCE

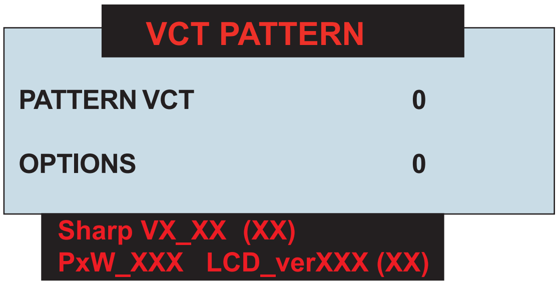
Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**



Pressing END button the OSD returns to the previous menu.

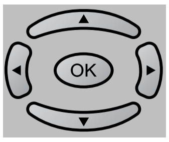


VCT PATTERN

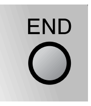
PATTERN VCT 0

OPTIONS 0

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



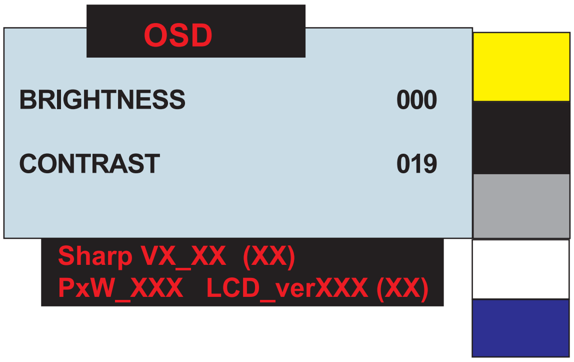
Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change pattern.



Press END button to return to the previous menu.

PATTERN VCT: Contains internal adjusting patterns for VCT IC.
OPTIONS: Changes of colour standards for the patterns.

OSD Menu
It allows to change to the brightness and the contrast of the On Screen Display.

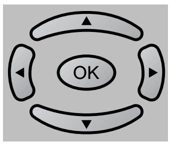


OSD

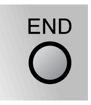
BRIGHTNESS 000

CONTRAST 019

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



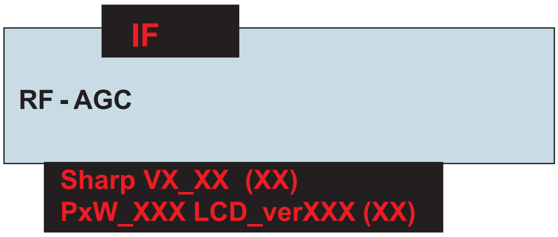
Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the left / right arrows to change between parameters.
Use the up / down arrows to change parameters.



Press END button to return to the previous menu.

IF Menu
Intermediate frequency AGC adjustment. To adjust this item tuning the TV in follow conditions:

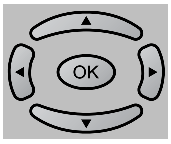
- Channel 12
- RF level: 60 dB/uV
- Pattern: Colour bar



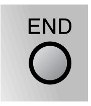
IF

RF - AGC

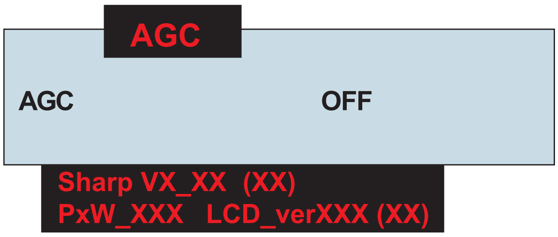
Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**



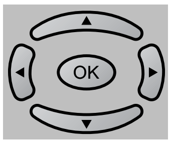
Press END button to return to the previous menu.



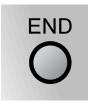
AGC

AGC OFF

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Confirm the selection with **OK.**
Use the up / down arrows to select between ON/OFF (It are blinking).



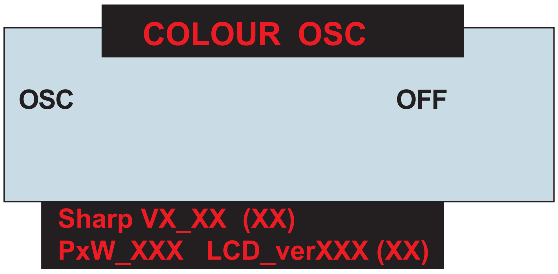
Press END button to return to the previous menu.

AGC: is adjusting automatically when ON is selected.
The next OSD appear:

ADJ OK!

Colour OSC Menu

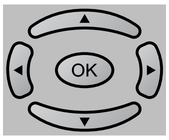
To adjust the colour sub-carrier with local oscillator (Adjust for PAL signals). Input 1, 2 or 3 video input terminal PAL colour bar. The Colour OSC is adjusted automatically when option ON is selected.



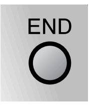
COLOUR OSC

OSC	OFF

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

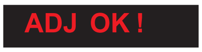


Confirm the selection with **OK.**
Use the up / down arrows to select between OFF/ ON.
When select ON, the COLOUR OSC is adjusted automatically.



Press END button to return to the previous menu.

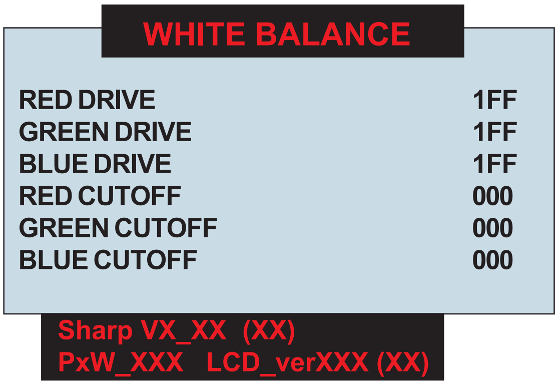
When COLOUR OSC is adjusted the next OSD appear:



ADJ OK !

White Balance Menu

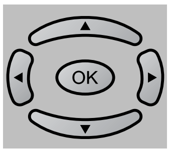
To adjust the Back Ground (BKGD) of TV.



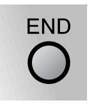
WHITE BALANCE

RED DRIVE	1FF
GREEN DRIVE	1FF
BLUE DRIVE	1FF
RED CUTOFF	000
GREEN CUTOFF	000
BLUE CUTOFF	000

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the left / right arrows to move between the parameters.
Use the up / down arrows to change the values.
Confirm the selection with **OK.**

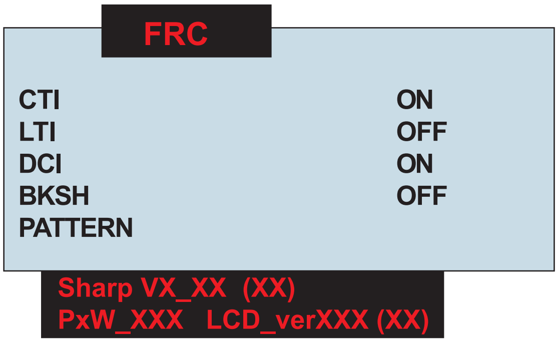


Press END button to return to the previous menu.

At TV will appear the factory adjust values.

FRC Menu

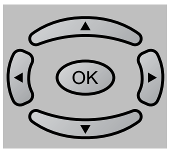
To adjust FRC IC. These parameters are adjusted and saved automatically when the ON option is selected.



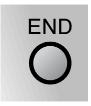
FRC

CTI	ON
LTI	OFF
DCI	ON
BKSH	OFF
PATTERN	

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

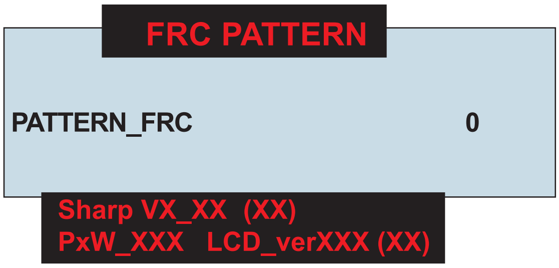


Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change between ON / OFF options.
Confirm the selection with **OK.**



Pressing END button the OSD returns to the previous menu.

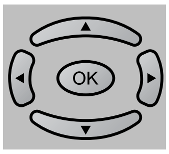
CTI:	**C**hroma **T**ransient **I**mprovement
LTI:	**L**uminance **T**ransient **I**mprovement
DCI:	**D**ynamic **C**ontrast **I**mprovement
BKSH:	**B**lack **S**tretcher
PATTERN:	Contains internal adjusting patterns for FRC IC.



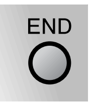
FRC PATTERN

PATTERN_FRC 0

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

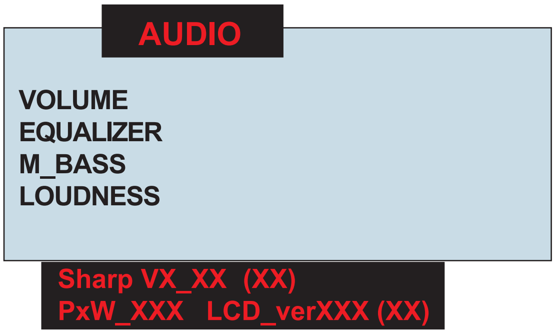


Confirm the selection with **OK.**
Using the up / down arrows appear the different patterns in order to adjust some parameter of FRC IC.



Press END button to return to the previous menu.

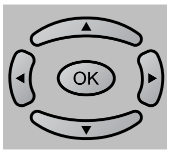
Audio Menu (Not operative)



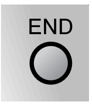
AUDIO

VOLUME
EQUALIZER
M_BASS
LOUDNESS

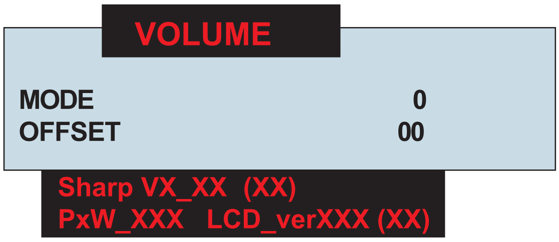
Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**



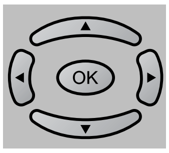
Press END button to return to the previous menu.



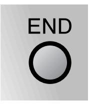
VOLUME

MODE 0
OFFSET 00

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

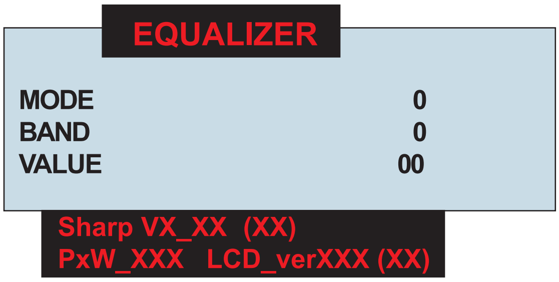


Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change values.
Confirm the selection with **OK.**



Press END button to return to the previous menu.

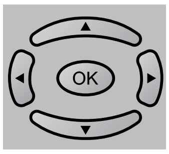
MODE: MONO, STEREO, DOLBY, PANORAMA
OFFSET: Value of compensation according to mode.



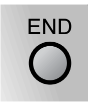
EQUALIZER

MODE 0
BAND 0
VALUE 00

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

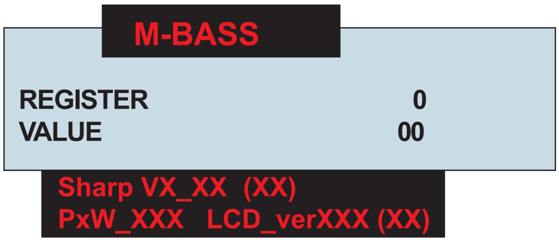


Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change values.
Confirm the selection with **OK.**



Press END button to return to the previous menu.

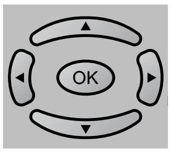
MODE: Not operative.
BAND: Choose the equalizer band.
VALUE: Offset added to the center point of the selected band.



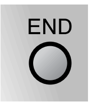
M-BASS

REGISTER 0
VALUE 00

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

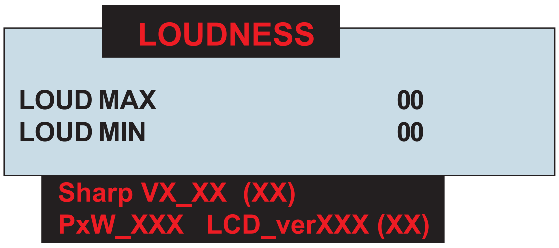


Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change values.
Confirm the selection with **OK.**



Press END button to return to the previous menu.

Parameters to adjust M-BASS features.

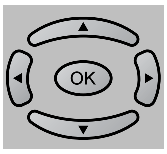


LOUDNESS

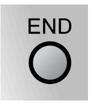
LOUD MAX 00
LOUD MIN 00

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

Maximum and minimum values of LOUD.



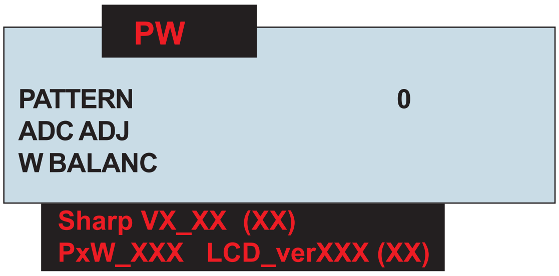
Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change values.
Confirm the selection with **OK.**



Press END button to return to the previous menu.

PW Menu

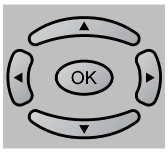
To check the PW IC.



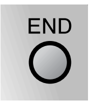
PW

PATTERN 0
ADC ADJ
W BALANC

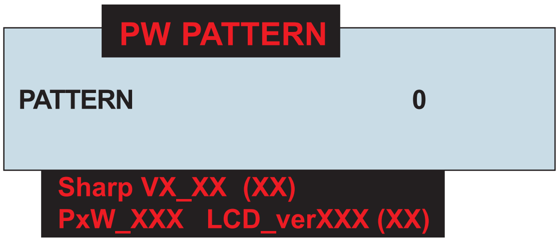
Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**



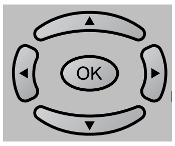
Press END button to return to the previous menu.



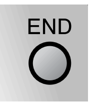
PW PATTERN

PATTERN 0

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

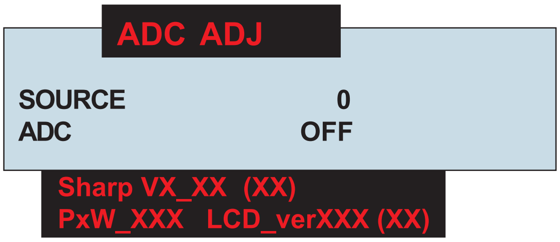


Confirm the selection with **OK.**
Using the up / down arrows appear the different patterns in order to check PW IC.



Press END button to return to the previous menu.

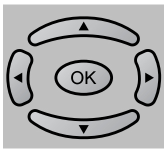
ADC Adjust (Operative from: VCTi 96 / PW 58 software version and upper)



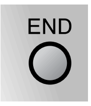
ADC ADJ

SOURCE 0
ADC OFF

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change between options.
Confirm the selection with **OK.**



Press END button to return to the previous menu.

SOURCE: TV, PC, Components
ADC: is adjusting automatically when ON is selected**.**
The next OSD appear:

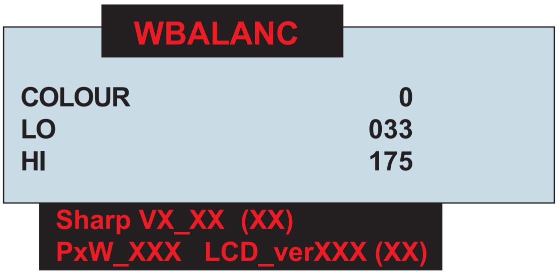
SAVED

Adjustments
Source 0: Video Composite
Input video: Not necessary
Select ADC item. When confirm selection with OK , OFF is flashing. Press the up arrow one time, and the adjust made automatically.

Source 1: PC
Input PC signal.
Pattern: Grey scale, 10 steps
Format: XGA (1024 x 768 @ 60Hz).
Use the up arrow menu to select source 1. Confirm the selection with OK. Use the up arrow menu to select ADC. Confirm selection with OK, OFF is flashing. Touch the up arrow one time, and the adjust made automatically.

Source 2: Component.
Input component signal.
Pattern: Grey scale, 10 steps.
Format: 720p / 50Hz.
Use the up arrow menu to select source 2. Confirm the selection with OK. Use the up arrow menu to select ADC. Confirm the selection with OK. Off is flashing. Touch the up arrow one time, and the adjust made automatically.

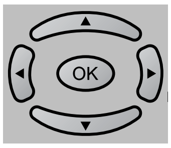
WBalanc
White Balance adjust of TV mode. Before to carry out the White Balance Adjustments, it is requested to achieve the Common bias and ADC adjustments in this order.



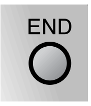
WBALANC

COLOUR	0
LO	033
HI	175

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change values.
Use the left / right arrows to change between parameters.



Press END button to return to the previous menu.

LO / HI: adjusting points to 20% and 80% of colour saturation.

Adjustment
Input 1, 2 or 3 video input terminal.
Pattern: White 20%.
Brightness and contrast: Dynamic settings.

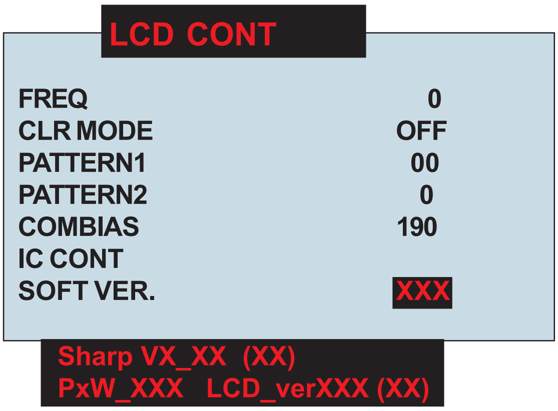
Change LO value in «COLOUR 0» (red) and «COLOUR 2» (blue) in order to become the reference value. Repeat as far as reference level is required.
Do not change green colour (1). It must be as default value.

Change pattern White 80%.

Change HI value in «COLOUR 0» (red) and «COLOUR 2» (blue) in order to become the reference value. Repeat as far as reference level is required.
Do not change green colour (1). It must be as default value.

LCD Cont Menu

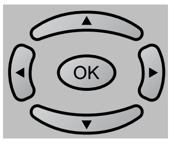
Panel control (QS board adjustments).



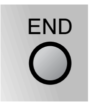
LCD CONT

FREQ	0
CLR MODE	OFF
PATTERN1	00
PATTERN2	0
COMBIAS	190
IC CONT	
SOFT VER.	XXX

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Using the up / down arrows the values are changed.

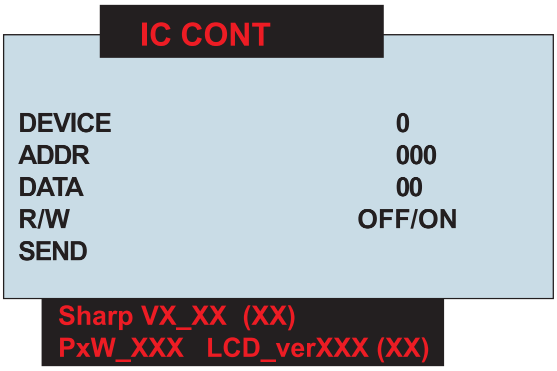


Press END button to return to the previous menu.

FREQ: Change between 50/60Hz and PC.
CLR MODE: When press OK key send the value to monitor microcontroller.
PATTERN1: Choose pattern to adjust QS.
PATTERN2: Choose pattern to adjust QS.
COMBIAS: Specific adjustment for QS. COMMON BIAS adjusting value is displayed.
IC CONT: See the next OSD.
SOFT VER.: Software version of QS IC. Display the version of monitor microcontroller.

COMBIAS Adjustment
Select COMBIAS and press the “OK” button so that the flicker screen will appear.
Adjust the flicker on the screen to minimum with up / down buttons on the remote control. At this time, press the “OK” key to complete the adjustment.

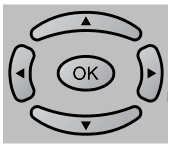
IC Cont Menu
Send specific data to the QS board.



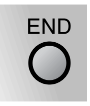
IC CONT

DEVICE	0
ADDR	000
DATA	00
R/W	OFF/ON
SEND	

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change values.
Use the left / right arrows to change between parameters.

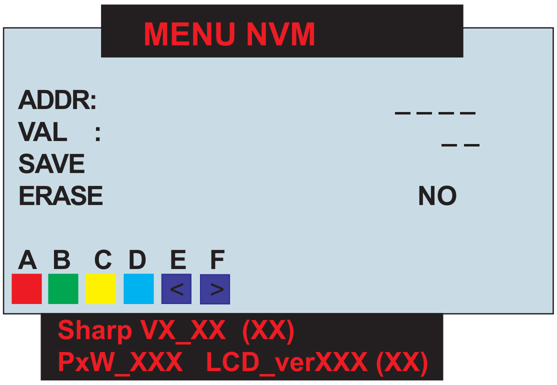


Press END button to return to the previous menu.

DEVICE: To select QS peripherals ICs. (0:LCD Controller / 1:QS Driver / 2: Extended Digital Analog Converter / 3: EEprom Microcontroller / 4: Reserved)
ADDR: Address of register.
DATA: Read mode: Display data after executing “SEND” / Write mode: Select data to write.
R/W: Select Read or Write. ON: write OFF: read.
SEND: Send data to QS.

NVM Menu

To change NVM values.

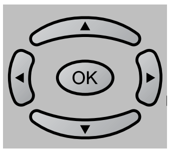


MENU NVM

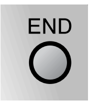
ADDR:	– – – –
VAL :	– –
SAVE	
ERASE	NO

A B C D E F
🟥 🟩 🟨 🟦 < >

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

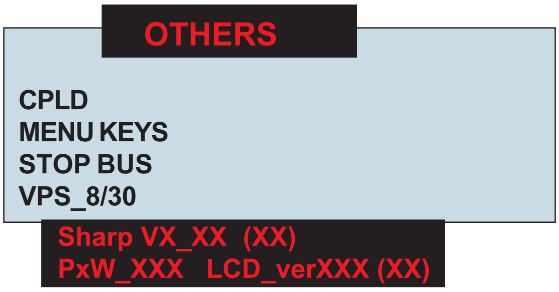


Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the left / right arrows to change between parameters.
Use the up / down arrows to change values.



Press END button to return to the previous menu.

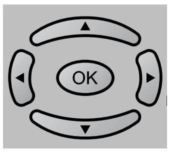
ADDR: NVM address.
VAL: NVM Value.
SAVE: Save NVM changes.
ERASE: If you select YES and Turn OFF - ON the TV by main switch, the data of NVM will be recorded to the default values .
In **ADDR** option of this menu, by using the colour buttons of R/C is possible to pass directly to A, B, C or D parameter.
Note:
DO NOT change any NVM data, unless you have been advised to do by a Sharp representative. If data is incorrectly changed, serious damage may occur to the receiver.



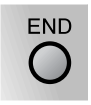
OTHERS

CPLD
MENU KEYS
STOP BUS
VPS_8/30

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



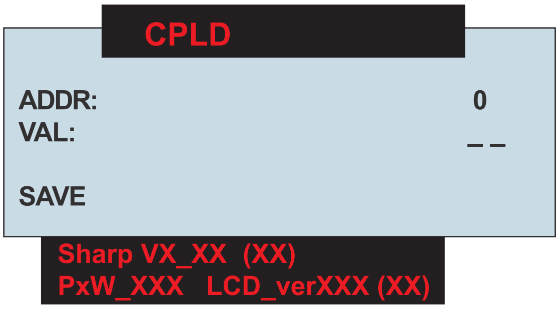
Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**



Press END button to return to the previous menu.

STOP BUS: Stop IC communication.

CPLD Menu (It is recommended do not modify this adjustment)
Specific data for CPLD IC (To check CPLD).

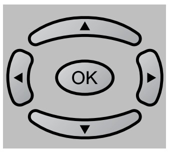


CPLD

ADDR: 0
VAL: _ _

SAVE

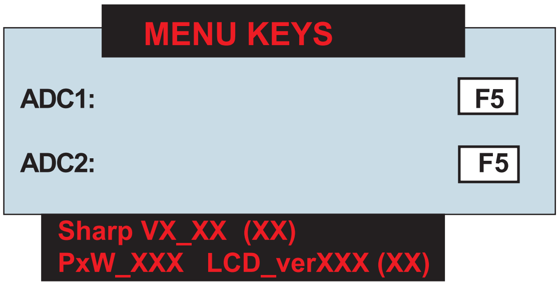
Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Use the up / down arrows to select a term in the menu.
Confirm the selection with **OK.**
Use the up / down arrows to change CPLD parameters.

Press END button to return to the previous menu.

KEYS Menu
Control menu of good operation of the top panel control keys.
If, when a key of the panel is pressed, the value who appears is within the parameters that appear in this menu, the operation of this key is correct.
High values near FF means, no key pressed.

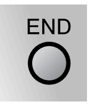


MENU KEYS

ADC1: F5

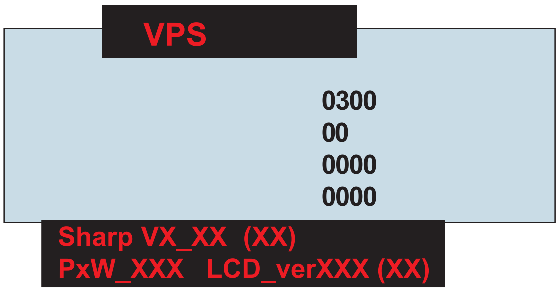
ADC2: F5

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Press END button to return to the previous menu.

VPS
Broadcasting code identification.



VPS

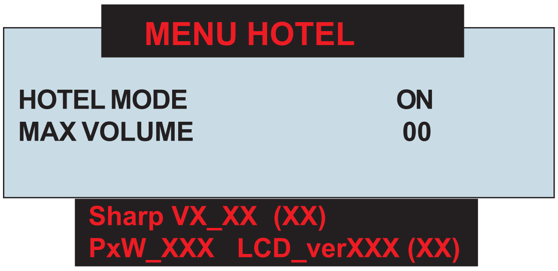
0300
00
0000
0000

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)

Only information about VPS. Changes are not allowed.

HOTEL Menu

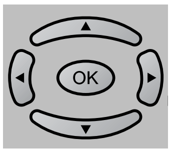
In this menu the Hotel Mode is activated or deactivated.



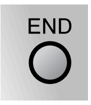
MENU HOTEL

HOTEL MODE ON
MAX VOLUME 00

Sharp VX_XX (XX)
PxW_XXX LCD_verXXX (XX)



Confirm the selection with **OK.**
Use the up / down arrows to change between ON/ OFF.



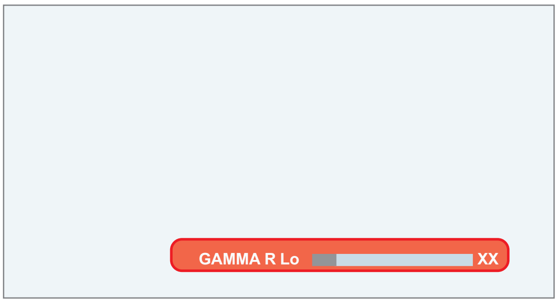
Press END button to return to the previous menu.

HOTEL MODE : To activate or to deactivate the HOTEL MODE.
MAX VOLUME : To limit the maximum volume.

HD Component White Balance

Before to carry out the HD Component White Balance Adjustments, it is requested to achieve the Common bias and ADC adjustments in this order.

Input Component signal format 720p / 50Hz (Pattern: White 20%.)
Change to EXT 4 in menu TV and set brightness and contrast to 50%.
Enter in adjustment process by remote control (☰ key). The following OSD appears:



☰ This Key (BROWSE) can be found in many CRT TV Remote Control. We detail two of them below:

Part Reference	SN Price Code	EX Price Code
RRMCG0739BMSA	AW	BT
RRMCG1022BMSA	**	BB

By up or down key choose Gamma R Lo or Gamma B Lo and adjust in order to become the reference value. Repeat as far as reference level is required.Don't change green colour. It must be as default value.

Change pattern: White 80%.
By up or down key choose Gamma R Hi or Gamma B Hi and adjust in order to become the reference value. Repeat as far as reference level is required.Don't change green colour. It must be as default value.

PC White Balance

Before to carry out the PC White Balance Adjustments, it is requested to achieve the Common bias and ADC adjustments in this order.

Input PC signal format -XGA (Pattern: White 20%.)
Change to PC Input in menu TV and set brightness and contrast to 50%.
Enter in adjustment process by remote control (browse key). The same White Balance Component HD OSD appears.

By up or down key choose Gamma R Lo or Gamma B Lo and adjust in order to become the reference value. Repeat as far as reference level is required.Don't change green colour. It must be as default value.

Change pattern: White 80%.
By up or down key choose Gamma R Hi or Gamma B Hi and adjust in order to become the reference value. Repeat as far as reference level is required.Don't change green colour. It must be as default value.

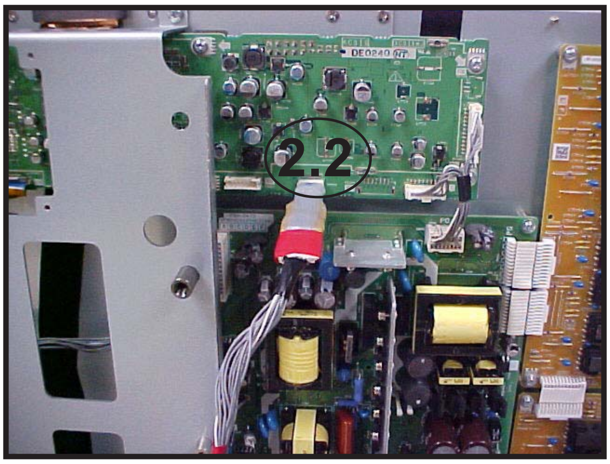
SOFTWARE UPDATING

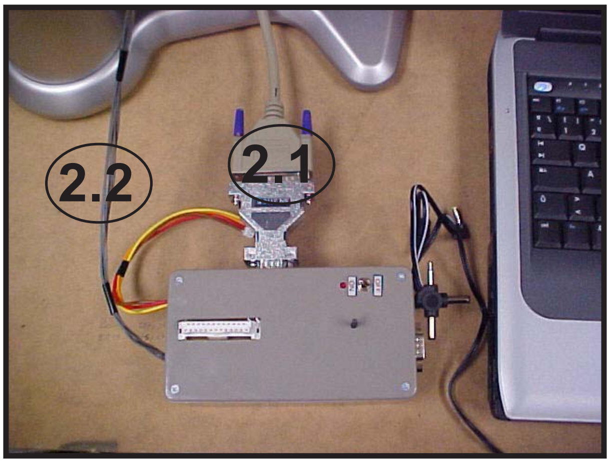
How to update VCTi Software

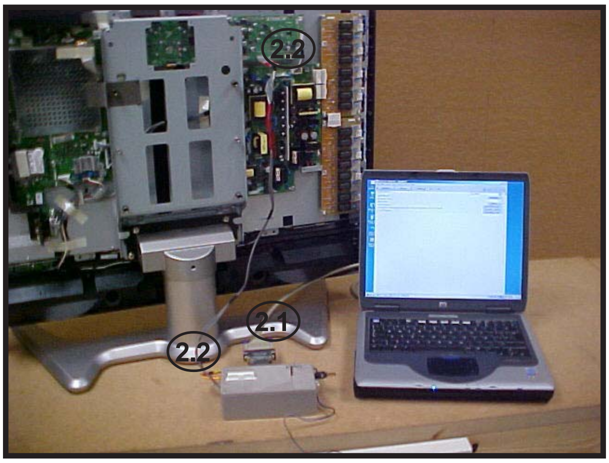
Hardware requirements

To update VCT it is needed:

1. A converter from Parallel port to DB9 supplied by Micronas, a male DB9 to female DB9 wire and the updating tool (Part Code: CKIT-0002WJV0).
2. Make the connections as indicated below.
   - 2.1. Connect Parallel cable from the updating tool to the PC.
   - 2.2. Connect the long cable from the updating tool to the P2005 connector (LCD Controller PWB).







Software requirements

A complete Visual I2C (VI2C) installation consists of 4 software components:

1. Visual I2C main program (‘visuali2c.exe’ and several DLL files)
2. Several DALs: These are IC specific low-level access drivers for the I2C bus.
3. A Windows port driver (LPT or USB). There are three versions for Win9x and WinNT/2000/XP.
4. One or more applications (‘*.vi2c’). They’re representing the interface to the user.

Software preparation

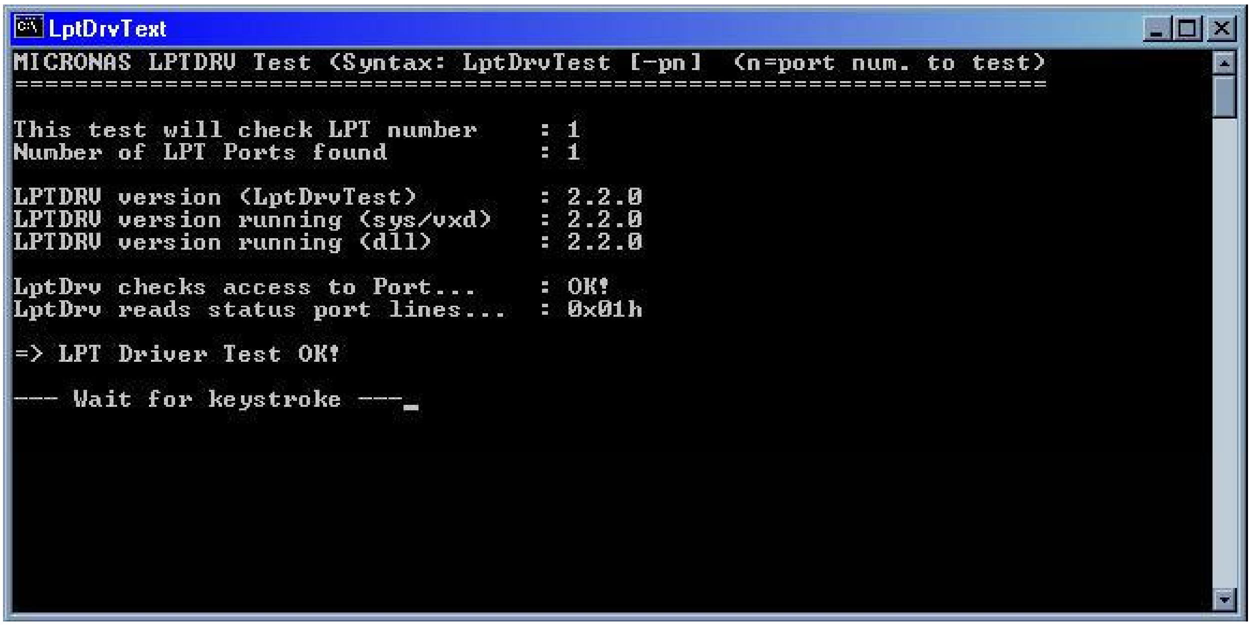
Move to folder:
- D:\SOFTWARE UPDATE GA5\Installation order VCTi\1
- Install Visual I2C (SETUP_VISUAL_I2C_V3_1_7C.EXE)

It’s strongly recommended to accept the suggested default folder.

Move to folder:
-D:\SOFTWARE UPDATE GA5\Installation order VCTi\2
-Install LPT driver SETUP_LPTDRVDEV_V0202_XP_20.EXE
Use for Windows 95/98:   Setup_LptDrv_v0104_9x.exe
Use for Windows 2000/XP: Setup_LptDrv_v0202_XP_20.exe
Use for Windows NT: Setup_LptDrv_v0104_NT.exe

After installing VI2C, the new generated file structure should look like this:
—> Micronas
|—> LptDrv   (in case of parallel port driver installed!)
|—> Visual I2C
|—> dal
|—> doc
|—> Port_Driver
-Check installation of LPT driver:
C:\Program Files\Micronas\LptDrv\LptDrvTest.exe

If the LPT Driver is OK, the next picture shows:



```
MICRONAS LPTDRV Test (Syntax: LptDrvTest [-pn]  (n=port num. to test)
=====================================================================

This test will check LPT number    : 1
Number of LPT Ports found          : 1

LPTDRV version (LptDrvTest)        : 2.2.0
LPTDRV version running (sys/vxd)   : 2.2.0
LPTDRV version running (dll)       : 2.2.0

LptDrv checks access to Port...    : OK!
LptDrv reads status port lines...  : 0x01h

=> LPT Driver Test OK!

--- Wait for keystroke ---_
```

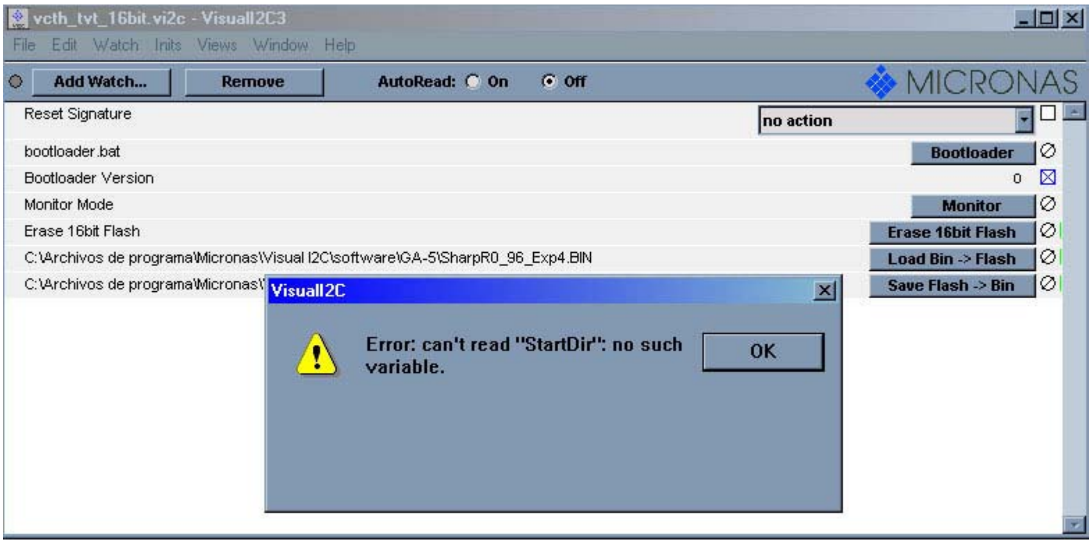
If this test is not OK, check in your BIOS: Parallel Port Mode = EPP

Move to folder:
-D:\SOFTWARE UPDATE GA5\Installation order VCTi\VCT49xyi
-Copy all the content to the folder C:\Program Files\Micronas\Visual I2C and after selecting all files and directories an change the «Read only» property. (When you copy from CD, the files are read only protected)

Check your installation:
-When you finish this process the Visual I2C is ready for Win2000 and XP
-LptDriver V.2.2.0 and VctiDown.exe V 1.3 are installed.

-If you have Win98 is necessary change version VctiDown.exe.
-Extract C:\Program Files\Micronas\Visual I2C\VCT49xyi\download\VctiDown_v1-2.zip in the same folder.
-Check LptDriver V1.4.0 and VctiDown.exe V1.2 are installed (Win98).

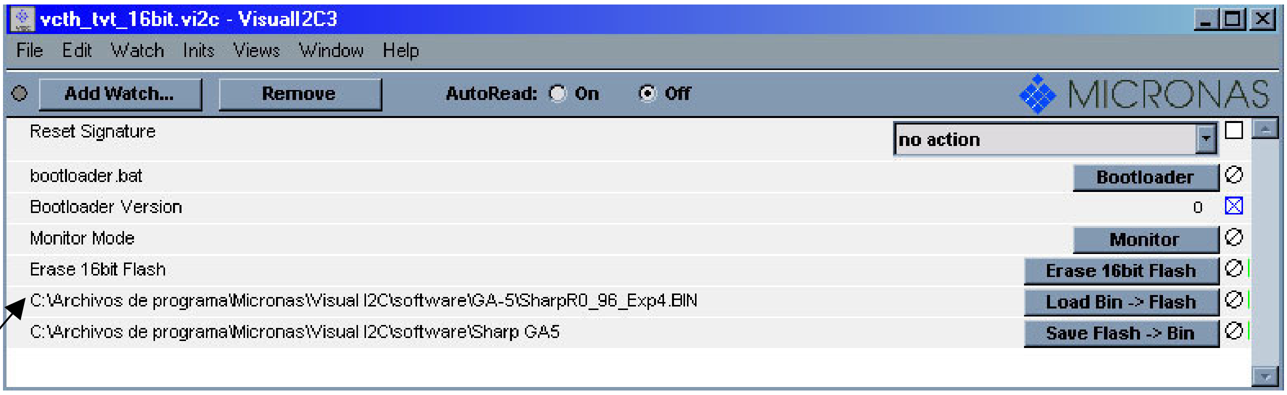
How to use the application
-To start VCTi software updater program, you can create direct access to:
C:\Program Files\Micronas\Visual I2C\VCT49xyi\vcth_tvt_16bit.vi2c
-Run direct access «vcth_tvt_16bit.vi2c».


vcth_tvt_16bit.vi2c - Visuall2C3
File Edit Watch Inits Views Window Help
Add Watch...
Remove
AutoRead: ○ On ● Off
MICRONAS
Bootloader
Monitor
Erase 16bit Flash
Load Bin -> Flash
Save Flash -> Bin
Visual2C
OK

Reset Signature: no action
bootloader.bat
Bootloader Version: 0
Monitor Mode
Erase 16bit Flash
C:\Archivos de programa\Micronas\Visual I2C\software\GA-5\SharpR0_96_Exp4.BIN
C:\Archivos de programa\Micronas\

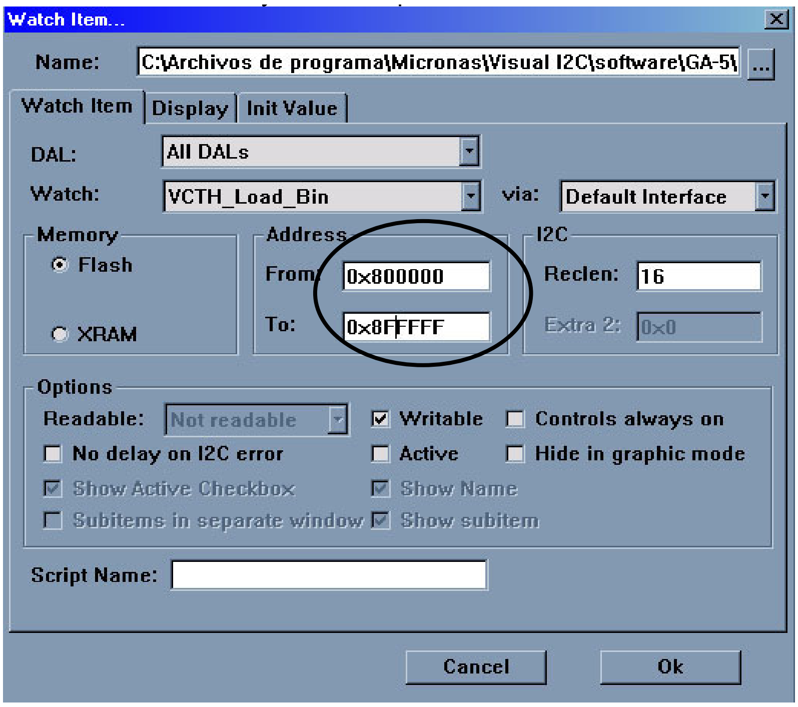
Error: can't read "StartDir": no such variable.

-Press OK and Error disappear. Now the program is available for use.


vcth_tvt_16bit.vi2c - Visuall2C3
File Edit Watch Inits Views Window Help
Add Watch...
Remove
AutoRead: ○ On ● Off
MICRONAS
Bootloader
Monitor
Erase 16bit Flash
Load Bin -> Flash
Save Flash -> Bin

Reset Signature: no action
bootloader.bat
Bootloader Version: 0
Monitor Mode
Erase 16bit Flash
C:\Archivos de programa\Micronas\Visual I2C\software\GA-5\SharpR0_96_Exp4.BIN
C:\Archivos de programa\Micronas\Visual I2C\software\Sharp GA5

- Double click the file name in the **Load Bin** field and select the software version file.
- The first time you do this process confirm that the field address is from 0x800000 to 0x8FFFFF.

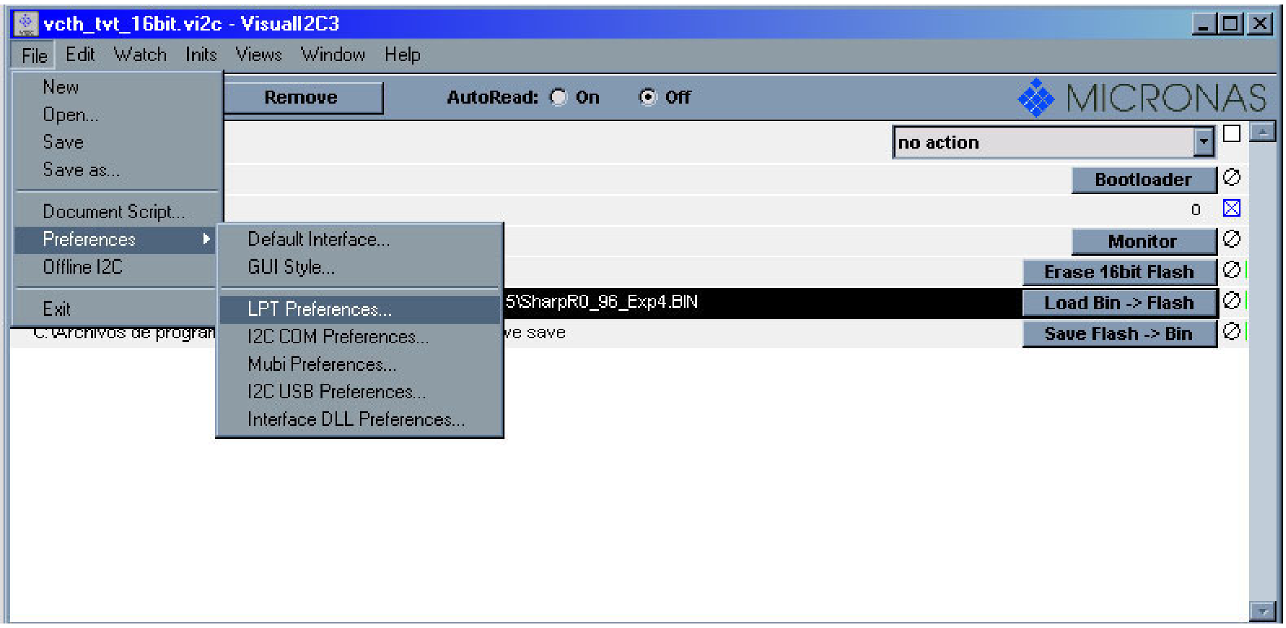

Watch Item...
Watch Item
Display
Init Value
Memory
Address
I2C
Options
Cancel
Ok

Name: C:\Archivos de programa\Micronas\Visual I2C\software\GA-5\
DAL: All DALs
Watch: VCTH_Load_Bin
via: Default Interface
Memory: ● Flash ○ XRAM
Address From: 0x800000
To: 0x8FFFFF
Reclen: 16
Extra 2: 0x0
Readable: Not readable
☑ Writable
☐ Controls always on
☐ No delay on I2C error
☐ Active
☐ Hide in graphic mode
☑ Show Active Checkbox
☑ Show Name
☐ Subitems in separate window
☑ Show subitem
Script Name:

- Select Bootloader option. Set AutoRead to ON and wait until 21 appears in Bootlader Version field.
- Click on the button Erase 16bit Flash. The bootloader version will be zero during few seconds. When the version field marks again 21 set Auto Read OFF.
- Click on the button LOAD BIN -> FLASH and the updating will start up.
- The updating will end before the progress bar reaches the end; if there is no error message the updating has been good.

Sometime the progress bar is very quick or error message appears, then is necessary increase the delay until the problem disappear:

-Select LPT Preference.


vcth_tvt_16bit.vi2c - VisualI2C3
File
Edit
Watch
Inits
Views
Window
Help
New
Open...
Save
Save as...
Document Script...
Preferences
Offline I2C
Exit
Default Interface...
GUI Style...
LPT Preferences...
I2C COM Preferences...
Mubi Preferences...
I2C USB Preferences...
Interface DLL Preferences...
Remove
MICRONAS
Bootloader
Monitor
Erase 16bit Flash
Load Bin -> Flash
Save Flash -> Bin

AutoRead: ○ On ● Off

no action

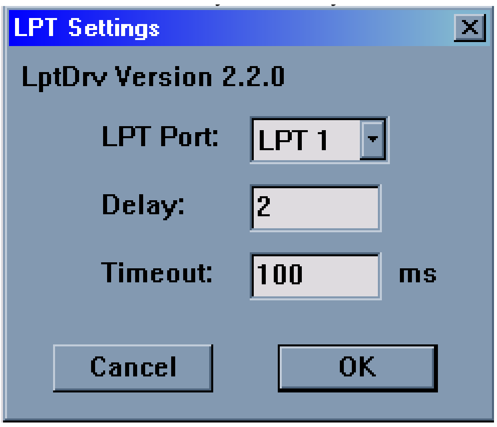
0

C:\Archivos de progran

5\SharpR0_96_Exp4.BIN

ve save

- Increase Delay: normally 2 or 3 are the best choice.


LPT Settings
Cancel
OK

LptDrv Version 2.2.0

LPT Port: LPT 1

Delay: 2

Timeout: 100 ms

If there are further problems to enter the bootloader mode you can use the hardware method:

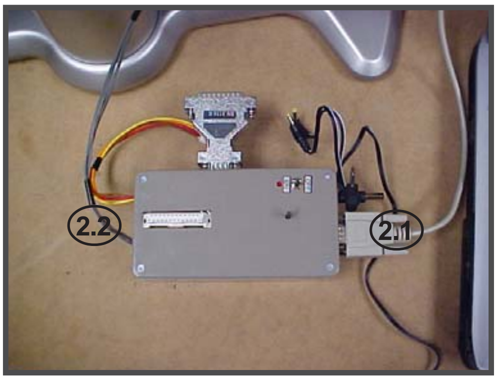
- Power off VCTi or hold RESET line to GND
- Pull down SCL line to GND
- Power up VCTi or release RESET line
- Release SCL pull down after minimum of 1 second

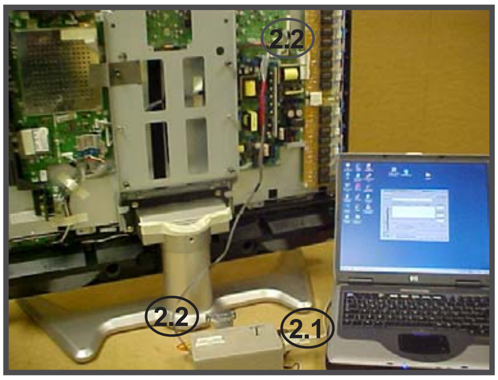
How to Update Pixelworks Software

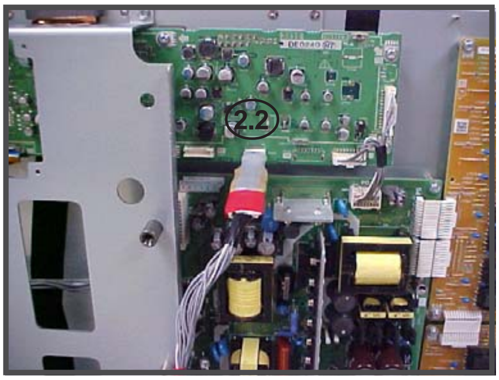
Hardware requirements

To update Pixelworks it is needed:

1. A female DB9 to male DB9 wire and the updating tool (Part Code: CKIT-0002WJV0).
2. Make the connections as indicated below.
    2.1. Connect a Serial cable from the updating tool to the PC.
    2.2. Connect the long cable from the updating tool to the P2005 connector (LCD Controller PWB).







Software requirements

Pixel Works FlashUpgrader.

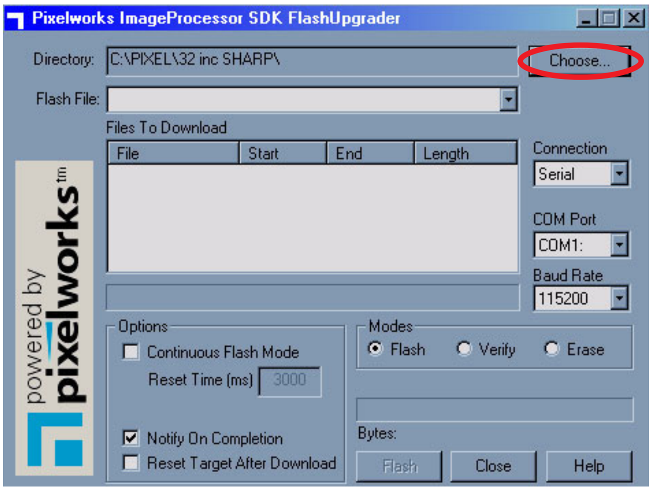
Software preparation

- Create in the PC C:\Pixel folder.

-Copy file FlashUpgrader.exe from D:\SOFTWARE UPDATE GA5\Pixel Works to C:\Pixel that you have created previously.

How to use the application

- Switch on the set you want to update and enter in service mode.
- Double click on C:\Pixel\FlashUpgrader.exe to start the program. The below picture appear:


Pixelworks ImageProcessor SDK FlashUpgrader
Choose...
Files To Download
File
Start
End
Length
powered by pixelworks™
Flash
Close
Help

Directory: C:\PIXEL\32 inc SHARP\

Flash File:

Connection: Serial

COM Port: COM1:

Baud Rate: 115200

Options

☐ Continuous Flash Mode

Reset Time (ms) 3000

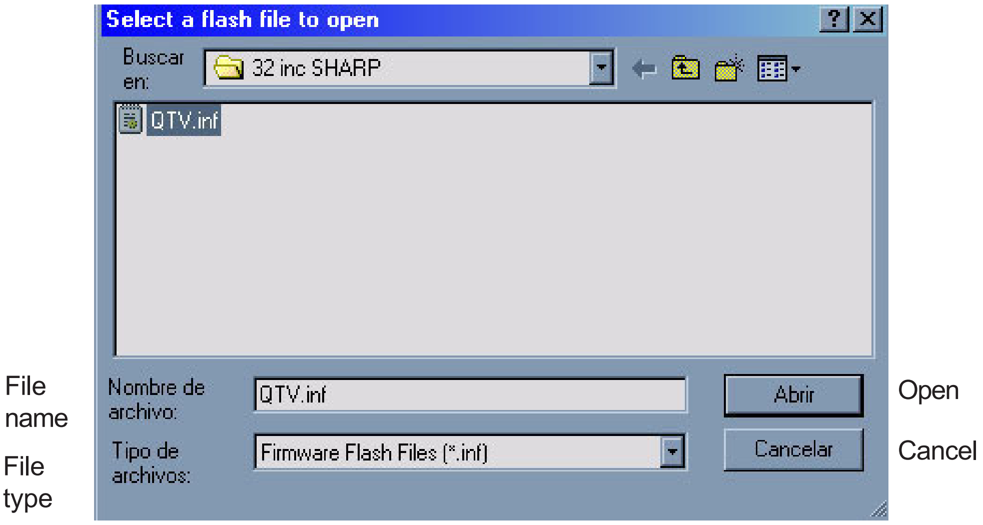
☑ Notify On Completion

☐ Reset Target After Download

Modes: ● Flash ○ Verify ○ Erase

Bytes:

- Click on «Choose» and select the QTV.inf file where you have the software version.



Select a flash file to open

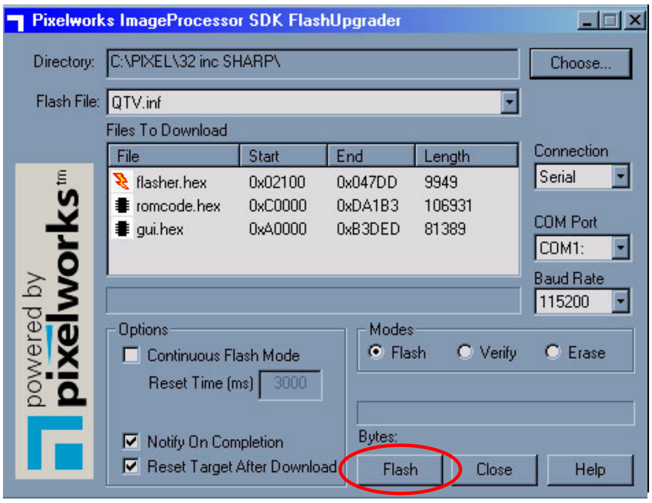
Buscar en: 32 inc SHARP

QTV.inf

Nombre de archivo: QTV.inf

Tipo de archivos: Firmware Flash Files (*.inf)

- Click on Flash button and the program is waiting for target reset.



Pixelworks ImageProcessor SDK FlashUpgrader

Directory: C:\PIXEL\32 inc SHARP\

Flash File: QTV.inf

Files To Download

File	Start	End	Length
flasher.hex	0x02100	0x047DD	9949
romcode.hex	0xC0000	0xDA1B3	106931
gui.hex	0xA0000	0xB3DED	81389

Connection: Serial

COM Port: COM1:

Baud Rate: 115200

Options

☐ Continuous Flash Mode

Reset Time (ms) 3000

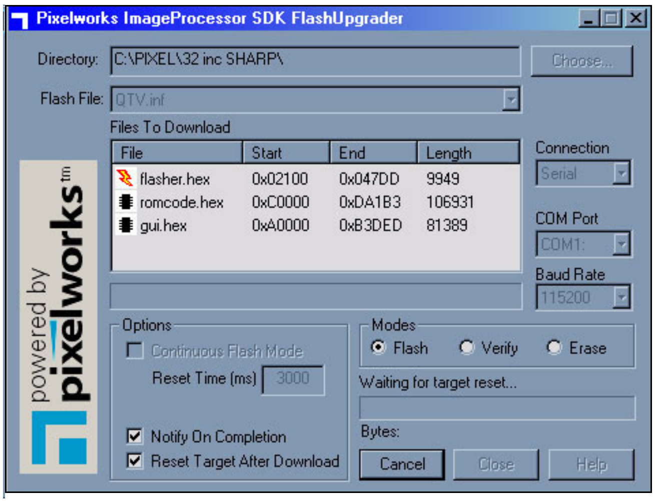
☑ Notify On Completion

☑ Reset Target After Download

Modes: ● Flash ○ Verify ○ Erase

Bytes:

- Press Input mode (TV/Video) key on the remote control to reset the Pixel IC and start updating.



Pixelworks ImageProcessor SDK FlashUpgrader

Directory: C:\PIXEL\32 inc SHARP\

Flash File: QTV.inf

Files To Download

File	Start	End	Length
flasher.hex	0x02100	0x047DD	9949
romcode.hex	0xC0000	0xDA1B3	106931
gui.hex	0xA0000	0xB3DED	81389

Connection: Serial

COM Port: COM1:

Baud Rate: 115200

Options

☐ Continuous Flash Mode

Reset Time (ms) 3000

☑ Notify On Completion

☑ Reset Target After Download

Modes: ● Flash ○ Verify ○ Erase

Waiting for target reset...

Bytes:

If there is not reported any error the update is done, but you can verify the update following the same process but

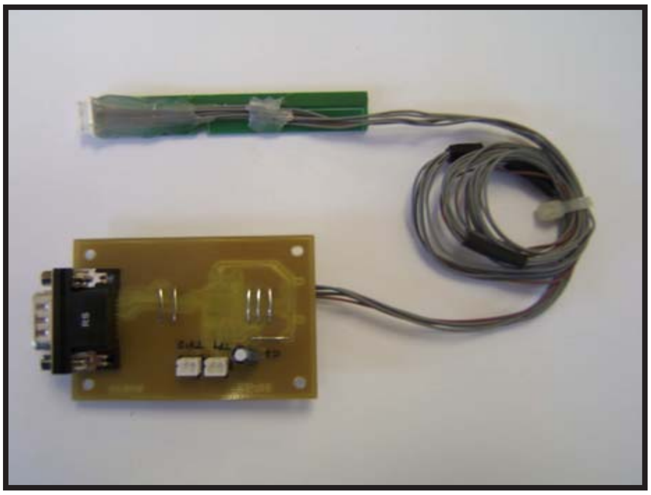
How to Update the Monitor Microcontroller Software

There are 2 ways to update the monitor microcontroller software:

1. Only LCD controller board itself
2. TV Set (already assembled)

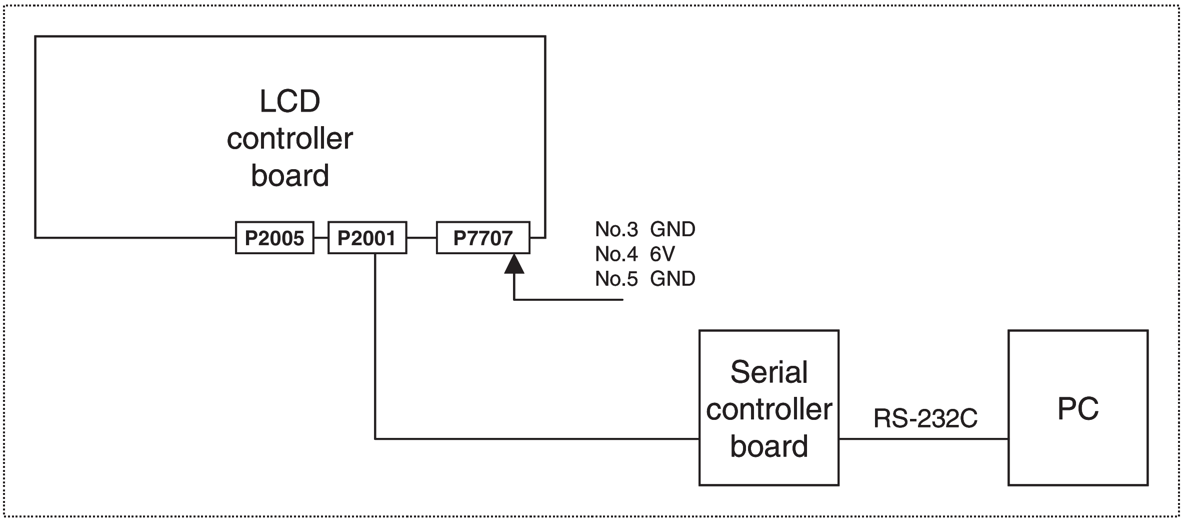
Preparation

- (A) MoniWrite.exe(Application)
- (B) Monitor microcontroller software (*.MOT)
- (C) RS-232C cross cable
- (D) Serial controller board. (Part code: CKIT-0003WJV0).



Connection

1. Only LCD controller board itself
   1.1- Connect serial controller board (D) and PC with RS-232C cross cable (C).
   1.2- Connect serial controller board (D) and the connector P2001 on LCD controller board.
   1.3- Supply 6V to No.4 of P7707 on LCD controller board.


LCD controller board
P2005
P2001
P7707
No.3 GND
No.4 6V
No.5 GND
Serial controller board
RS-232C
PC

2. TV set

2.1- Connect serial controller board (D) and PC with RS-232C cross cable (C).

2.2- Connect serial controller board (D) and the connector P2005 on LCD controller board via adapter (E).

2.3- Plug AC cable.

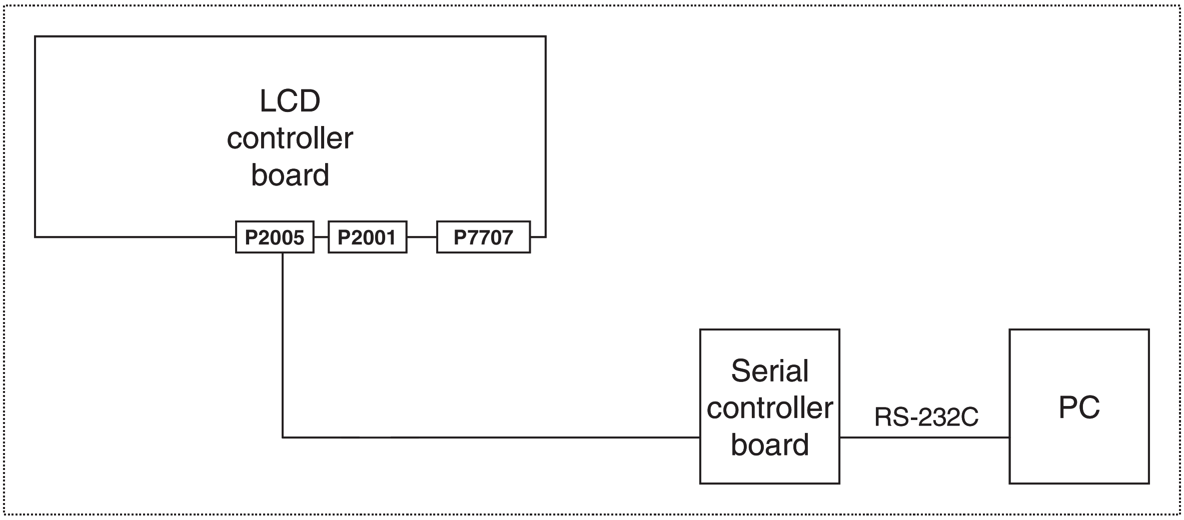
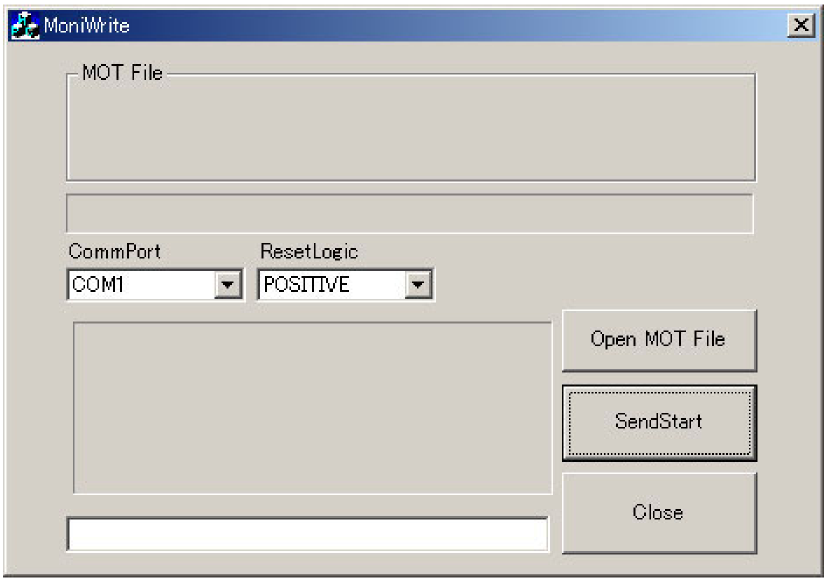

LCD controller board
P2005
P2001
P7707
Serial controller board
RS-232C
PC

Photo connection.

How to use the application (MoniWrite.exe)

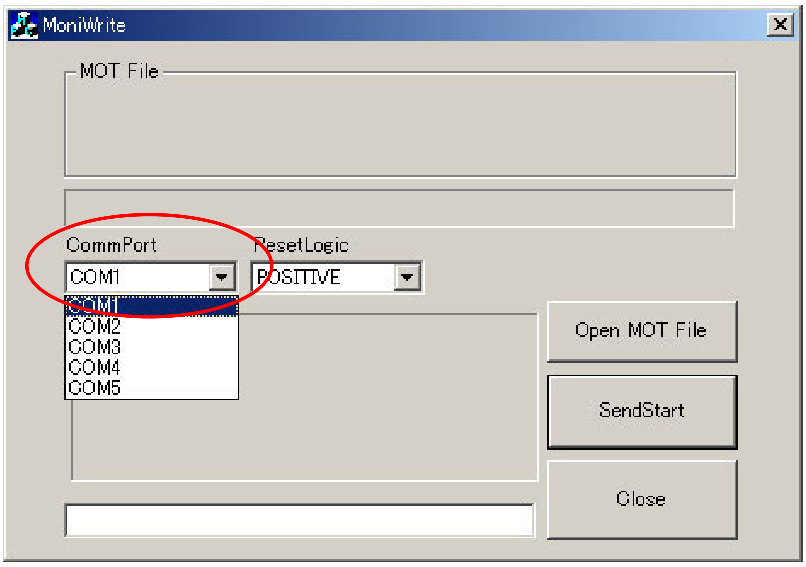
1. Start application

The following windows open.

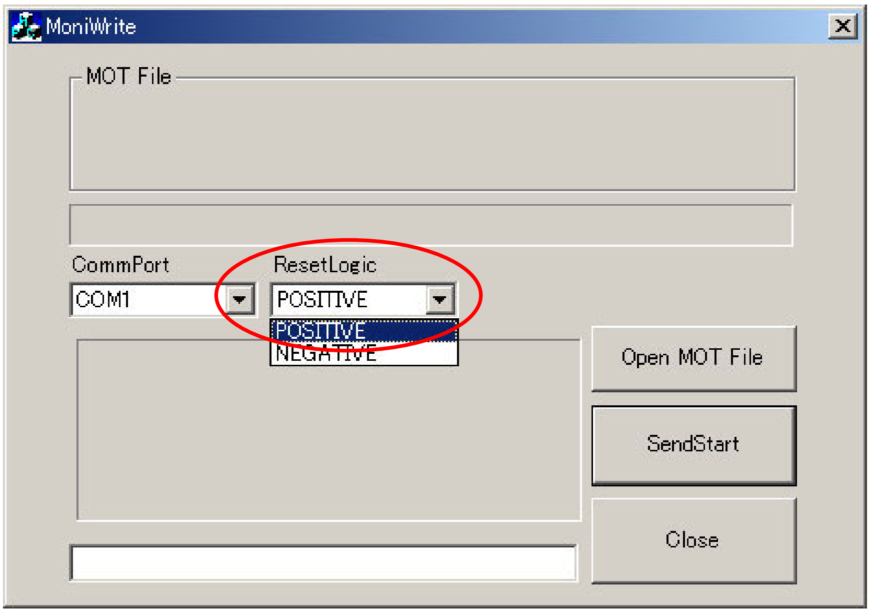

MoniWrite
MOT File
CommPort
ResetLogic
COM1
POSITIVE
Open MOT File
SendStart
Close

2. Select COM port

Select COM port connected with Serial Controller Board.


MoniWrite
MOT File
CommPort
ResetLogic
COM1
POSITIVE
COM1
COM2
COM3
COM4
COM5
Open MOT File
SendStart
Close

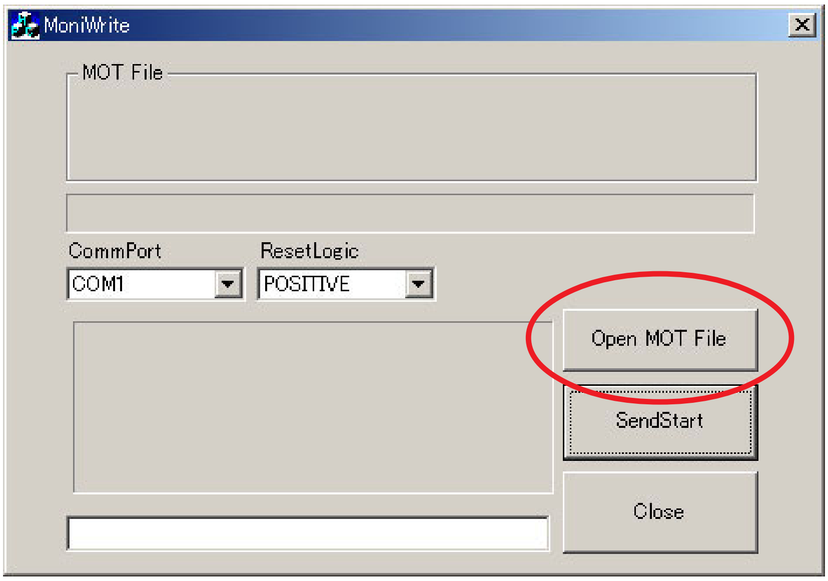
3. Select ResetLogic
Select ResetLogic «positive» or «negative».


MoniWrite
MOT File
CommPort
COM1
ResetLogic
POSITIVE
POSITIVE
NEGATIVE
Open MOT File
SendStart
Close

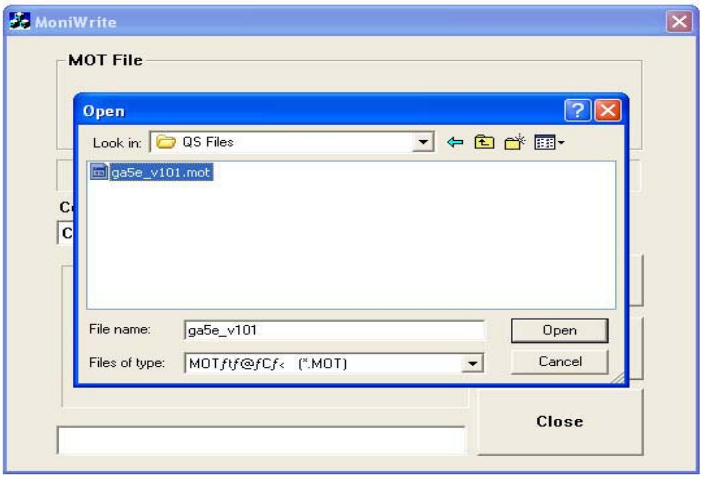
Resetlogic setting for each level hardware

1. Only board itself P2001	2. TV set (assembled) P2005
Negative	Positive

4. Open MOT File
4.1- Click «Open MOT File».


MoniWrite
MOT File
CommPort
COM1
ResetLogic
POSITIVE
Open MOT File
SendStart
Close

4.2- Select the monitor microcontroller software (*.MOT) to update.


MoniWrite
MOT File
Open
Close
Cancel

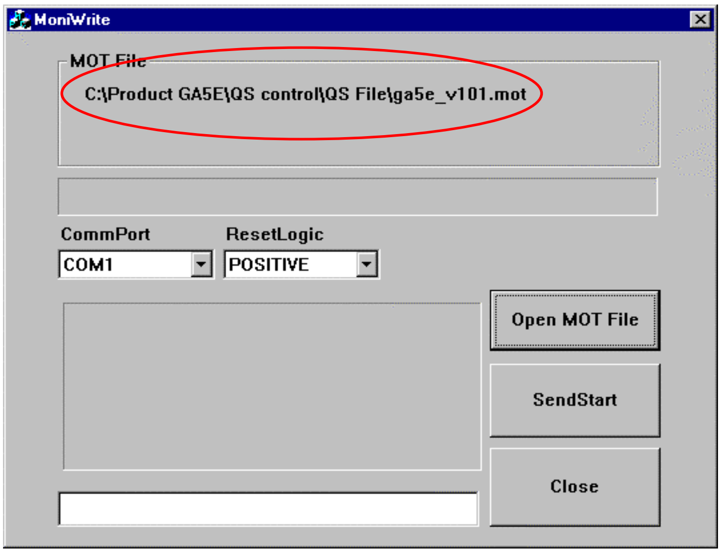
Look in: QS Files

ga5e_v101.mot

File name: ga5e_v101

Files of type: MOTƒtƒ@ƒCƒ‹ (*.MOT)

4.3- Check the selected file is correct.


MoniWrite
Open MOT File
SendStart
Close

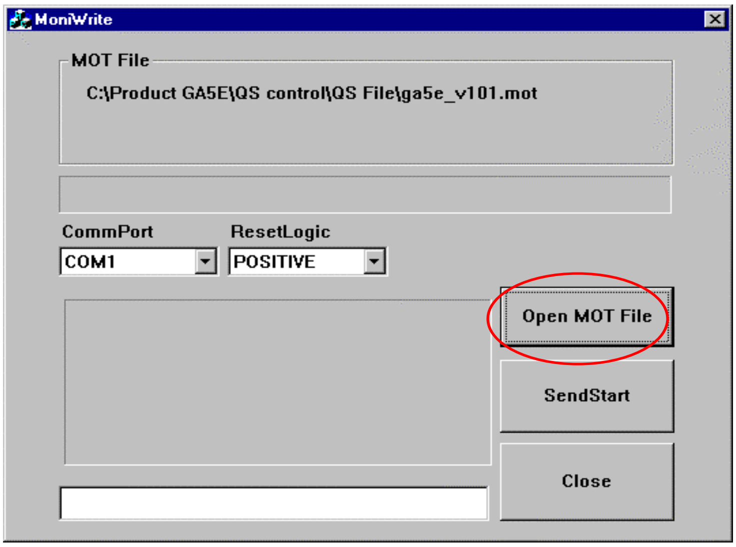
MOT File: C:\Product GA5E\QS control\QS File\ga5e_v101.mot

CommPort: COM1

ResetLogic: POSITIVE

5. Send Start

5.1- Click «SendStart» button and start updating.

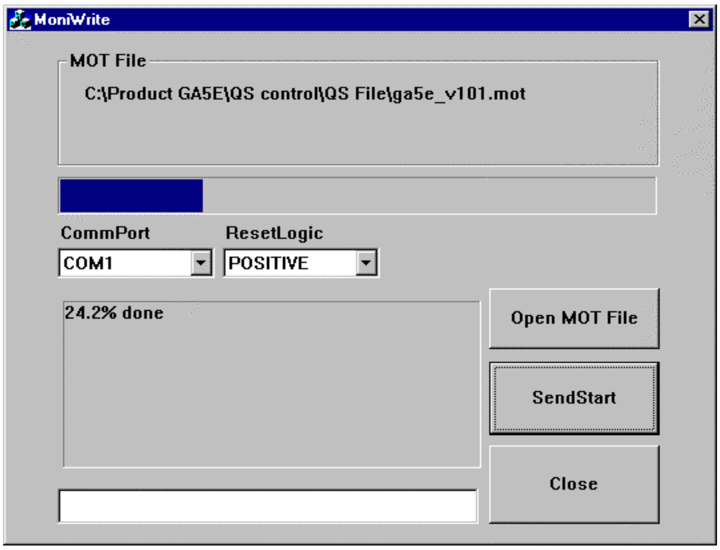

MoniWrite
Open MOT File
SendStart
Close

MOT File: C:\Product GA5E\QS control\QS File\ga5e_v101.mot

CommPort: COM1

ResetLogic: POSITIVE

5.2- Now updating....


MoniWrite
MOT File
CommPort
ResetLogic
Open MOT File
SendStart
Close

C:\Product GA5E\QS control\QS File\ga5e_v101.mot

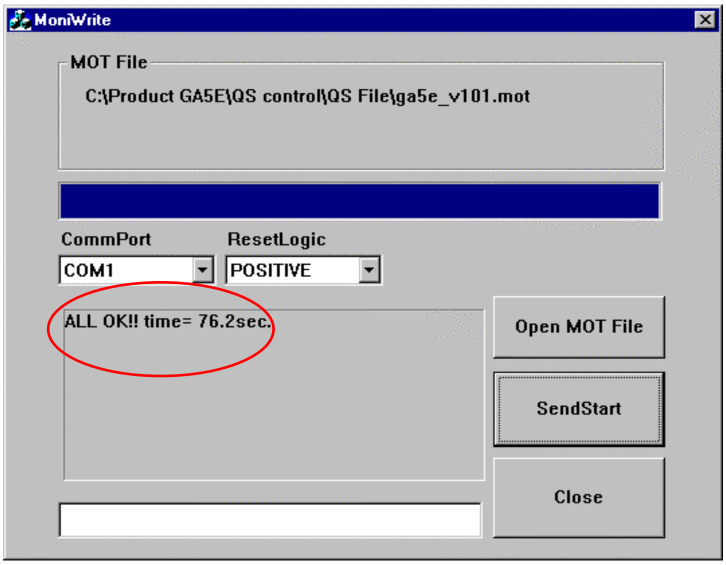
CommPort: COM1

ResetLogic: POSITIVE

24.2% done

(Send flash writing control program first, and then send the software.)

5.3- Update completed.


MoniWrite
MOT File
CommPort
ResetLogic
Open MOT File
SendStart
Close

C:\Product GA5E\QS control\QS File\ga5e_v101.mot

CommPort: COM1

ResetLogic: POSITIVE

ALL OK!! time= 76.2sec.

6. After update completed

6.1- Unplug AC cable

6.2- Disconnect serial control board.

TROUBLESHOOTING TABLE

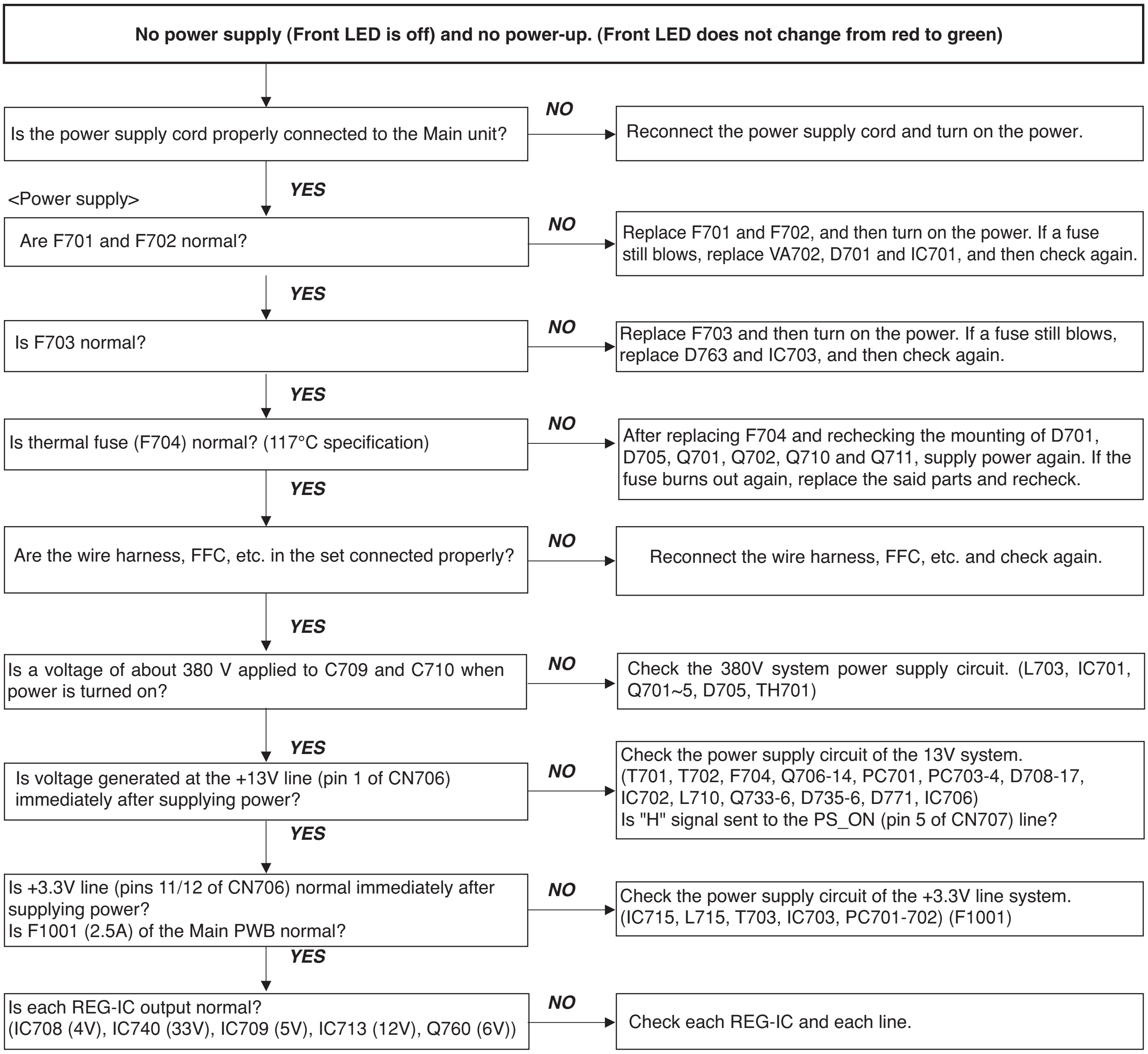
Previously to start following the behing troubleshooting tables, consider the below situations.

Problem	Possible Solution
• No power.	• Is the AC cord disconnected? • Has the power been turned on? • Make sure the ⏻ (**POWER**) switch of the TV is set to ON.
• Unit cannot be operated.	• External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the power off, or unplugging the AC cord and re-plugging it in after 1 or 2 minutes.
• Remote control unit does not operate.	• Are batteries inserted with polarity (+, −) aligned? • Are batteries worn out? (Replace with new batteries.) • Are you using it under strong or fluorescent lighting? • Is a fluorescent light illuminated to remote control sensor?
• Strange colour, light colour, or dark, or colour misalignment.	• Adjust the picture levels. • Is the room too bright? The picture may look dark in a room that is too bright. • Check the system setting. • Check the input type setting.
• Power is suddenly turned off.	• The unit's internal temperature has increased. Remove any objects blocking vent or clean. • Check the power control setting.
• No picture.	• Is connection to other components correct? • Has input type setup been done correctly after connection? • Is the correct input selected? • Is a non-compatible signal being input? • Is picture adjustment correct? • Is the antenna connected properly?
• No sound.	• Is the volume too low? • Make sure that headphones are not connected. • Make sure the sound is not set to Mute.

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
  Storage temperature: –20°C to +60°C (–4°F to +140°F).

Troubleshooting Table (continued)



No power supply (Front LED is off) and no power-up. (Front LED does not change from red to green)

Is the power supply cord properly connected to the Main unit?

NO: Reconnect the power supply cord and turn on the power.

YES

<Power supply>

Are F701 and F702 normal?

NO: Replace F701 and F702, and then turn on the power. If a fuse still blows, replace VA702, D701 and IC701, and then check again.

YES

Is F703 normal?

NO: Replace F703 and then turn on the power. If a fuse still blows, replace D763 and IC703, and then check again.

YES

Is thermal fuse (F704) normal? (117°C specification)

NO: After replacing F704 and rechecking the mounting of D701, D705, Q701, Q702, Q710 and Q711, supply power again. If the fuse burns out again, replace the said parts and recheck.

YES

Are the wire harness, FFC, etc. in the set connected properly?

NO: Reconnect the wire harness, FFC, etc. and check again.

YES

Is a voltage of about 380 V applied to C709 and C710 when power is turned on?

NO: Check the 380V system power supply circuit. (L703, IC701, Q701~5, D705, TH701)

YES

Is voltage generated at the +13V line (pin 1 of CN706) immediately after supplying power?

NO: Check the power supply circuit of the 13V system. (T701, T702, F704, Q706-14, PC701, PC703-4, D708-17, IC702, L710, Q733-6, D735-6, D771, IC706) Is "H" signal sent to the PS_ON (pin 5 of CN707) line?

YES

Is +3.3V line (pins 11/12 of CN706) normal immediately after supplying power? Is F1001 (2.5A) of the Main PWB normal?

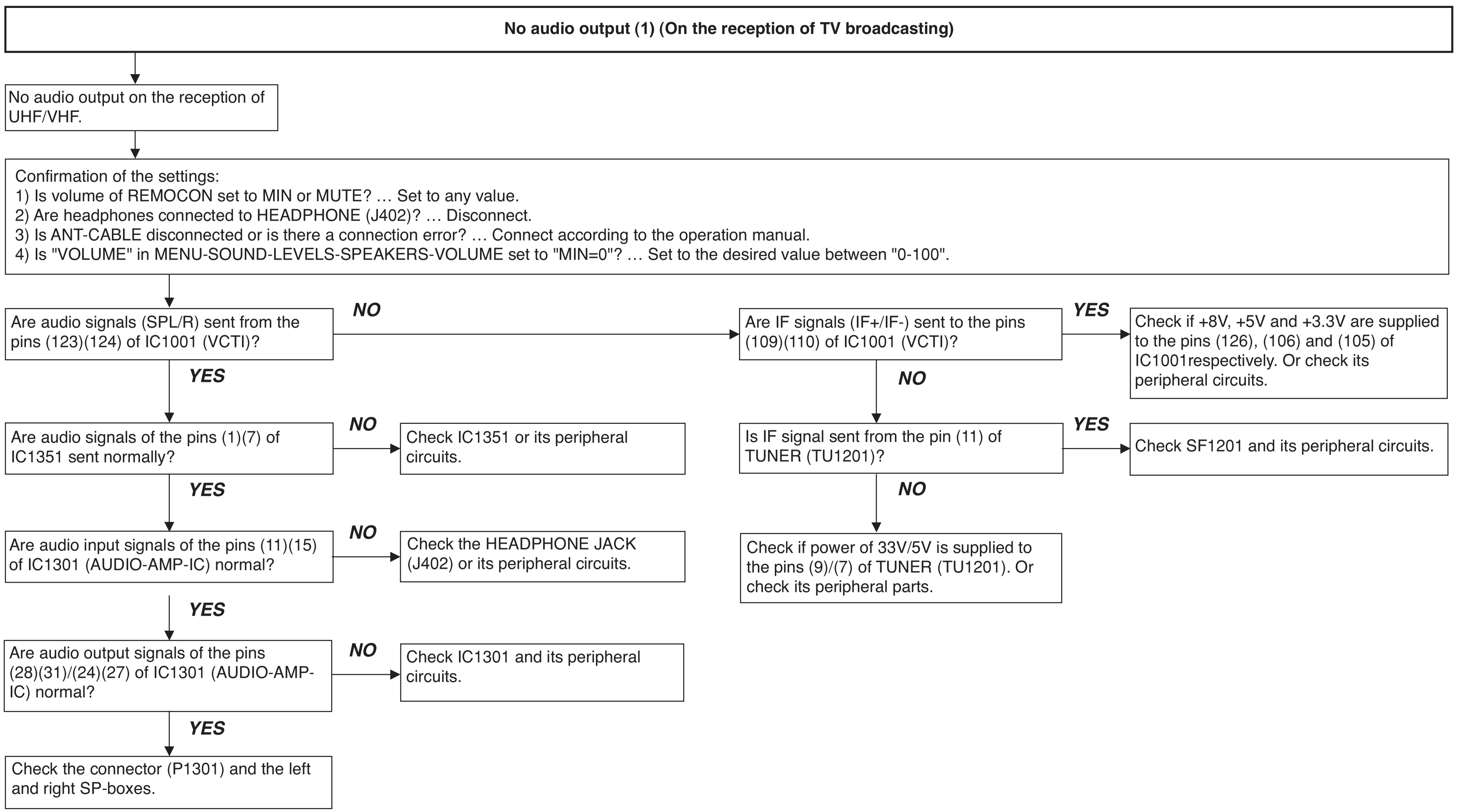
NO: Check the power supply circuit of the +3.3V line system. (IC715, L715, T703, IC703, PC701-702) (F1001)

YES

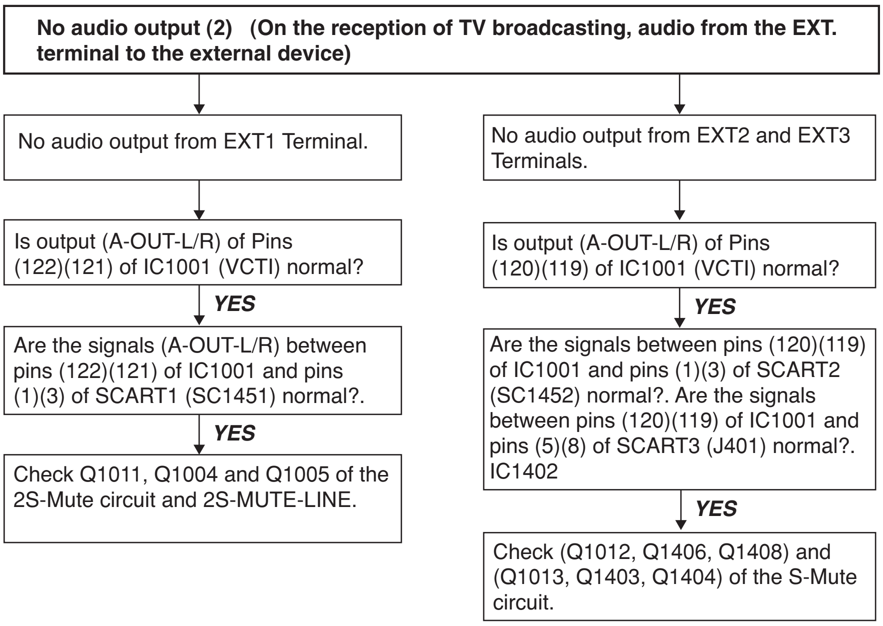
Is each REG-IC output normal? (IC708 (4V), IC740 (33V), IC709 (5V), IC713 (12V), Q760 (6V))

NO: Check each REG-IC and each line.

Troubleshooting Table (continued)


No audio output (1) (On the reception of TV broadcasting)
No audio output on the reception of UHF/VHF.
Confirmation of the settings:
1) Is volume of REMOCON set to MIN or MUTE? … Set to any value.
2) Are headphones connected to HEADPHONE (J402)? … Disconnect.
3) Is ANT-CABLE disconnected or is there a connection error? … Connect according to the operation manual.
4) Is "VOLUME" in MENU-SOUND-LEVELS-SPEAKERS-VOLUME set to "MIN=0"? … Set to the desired value between "0-100".
Are audio signals (SPL/R) sent from the pins (123)(124) of IC1001 (VCTI)?
NO
Are IF signals (IF+/IF-) sent to the pins (109)(110) of IC1001 (VCTI)?
YES
Check if +8V, +5V and +3.3V are supplied to the pins (126), (106) and (105) of IC1001respectively. Or check its peripheral circuits.
NO
Is IF signal sent from the pin (11) of TUNER (TU1201)?
YES
Check SF1201 and its peripheral circuits.
NO
Check if power of 33V/5V is supplied to the pins (9)/(7) of TUNER (TU1201). Or check its peripheral parts.
YES
Are audio signals of the pins (1)(7) of IC1351 sent normally?
NO
Check IC1351 or its peripheral circuits.
YES
Are audio input signals of the pins (11)(15) of IC1301 (AUDIO-AMP-IC) normal?
NO
Check the HEADPHONE JACK (J402) or its peripheral circuits.
YES
Are audio output signals of the pins (28)(31)/(24)(27) of IC1301 (AUDIO-AMP-IC) normal?
NO
Check IC1301 and its peripheral circuits.
YES
Check the connector (P1301) and the left and right SP-boxes.

Troubleshooting Table (continued)



No audio output (2) (On the reception of TV broadcasting, audio from the EXT. terminal to the external device)

No audio output from EXT1 Terminal.

Is output (A-OUT-L/R) of Pins (122)(121) of IC1001 (VCTI) normal?

YES

Are the signals (A-OUT-L/R) between pins (122)(121) of IC1001 and pins (1)(3) of SCART1 (SC1451) normal?.

YES

Check Q1011, Q1004 and Q1005 of the 2S-Mute circuit and 2S-MUTE-LINE.

No audio output from EXT2 and EXT3 Terminals.

Is output (A-OUT-L/R) of Pins (120)(119) of IC1001 (VCTI) normal?

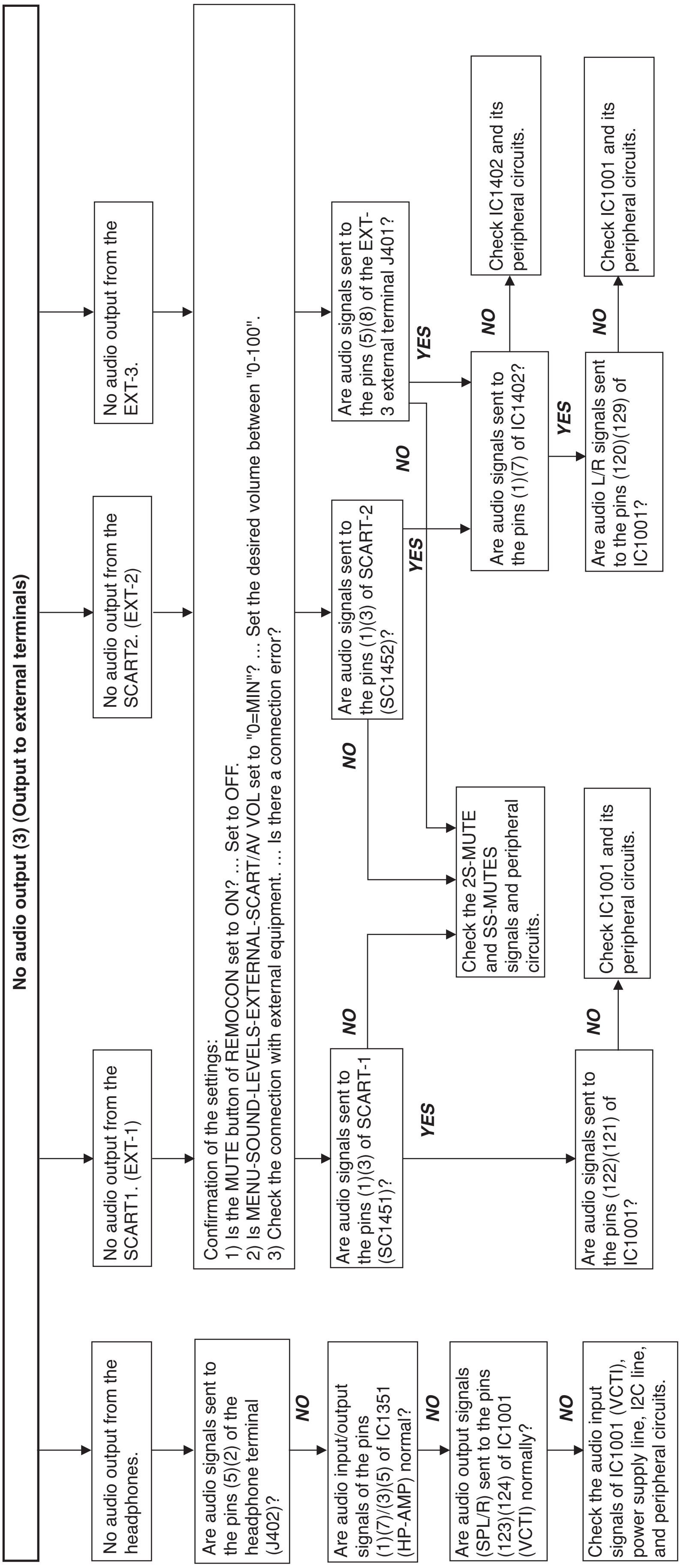
YES

Are the signals between pins (120)(119) of IC1001 and pins (1)(3) of SCART2 (SC1452) normal?. Are the signals between pins (120)(119) of IC1001 and pins (5)(8) of SCART3 (J401) normal?. IC1402

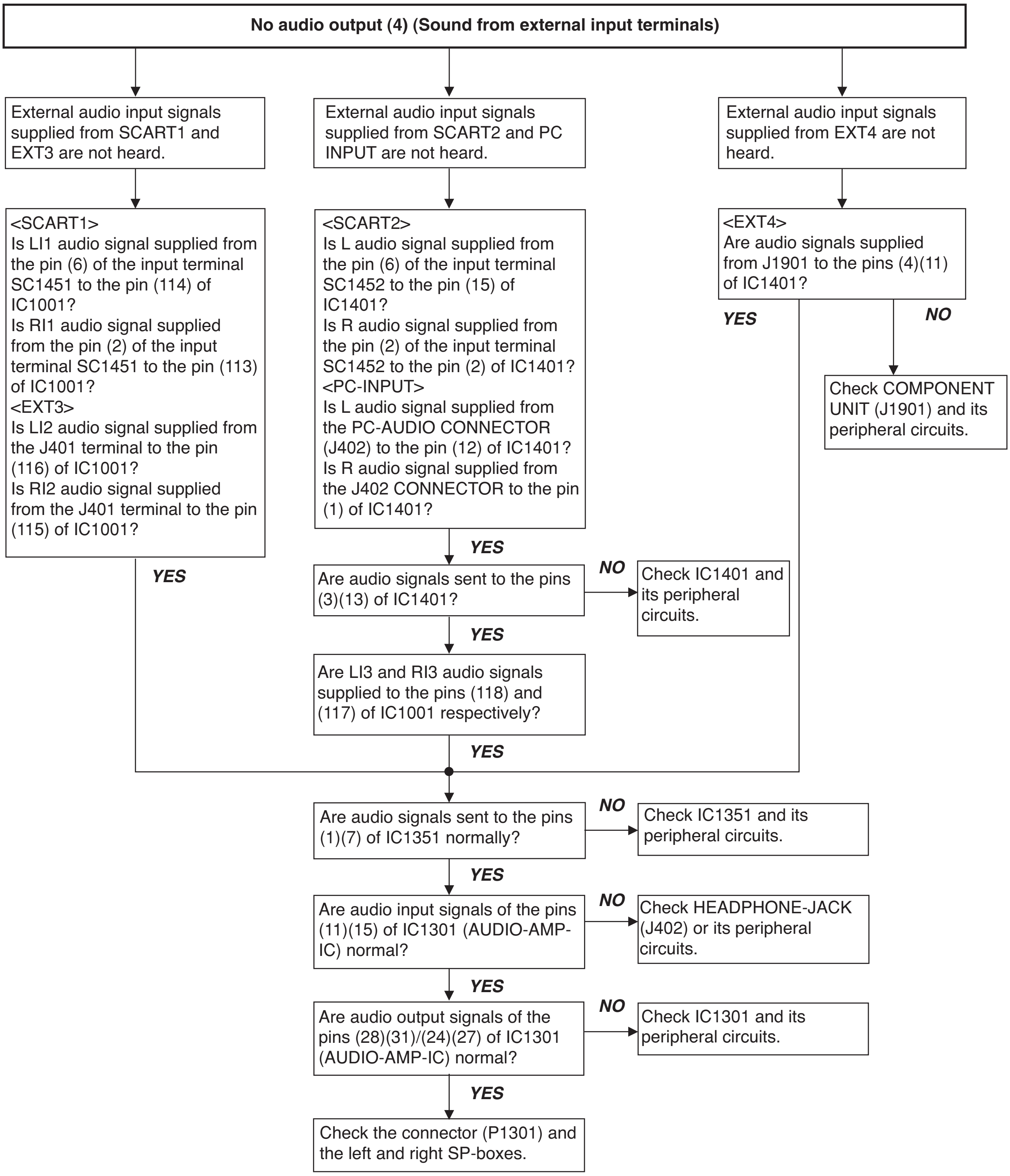
YES

Check (Q1012, Q1406, Q1408) and (Q1013, Q1403, Q1404) of the S-Mute circuit.

Troubleshooting Table (continued)


No audio output (3) (Output to external terminals)
No audio output from the headphones.
Are audio signals sent to the pins (5)(2) of the headphone terminal (J402)?
NO
Are audio input/output signals of the pins (1)(7)/(3)(5) of IC1351 (HP-AMP) normal?
NO
Are audio output signals (SPL/R) sent to the pins (123)(124) of IC1001 (VCTI) normally?
NO
Check the audio input signals of IC1001 (VCTI), power supply line, I2C line, and peripheral circuits.
No audio output from the SCART1. (EXT-1)
No audio output from the SCART2. (EXT-2)
No audio output from the EXT-3.
Confirmation of the settings:
1) Is the MUTE button of REMOCON set to ON? ... Set to OFF.
2) Is MENU-SOUND-LEVELS-EXTERNAL-SCART/AV VOL set to "0=MIN"? ... Set the desired volume between "0-100".
3) Check the connection with external equipment. ... Is there a connection error?
Are audio signals sent to the pins (1)(3) of SCART-1 (SC1451)?
NO
YES
Are audio signals sent to the pins (122)(121) of IC1001?
NO
Check IC1001 and its peripheral circuits.
Are audio signals sent to the pins (1)(3) of SCART-2 (SC1452)?
NO
YES
Check the 2S-MUTE and SS-MUTES signals and peripheral circuits.
Are audio signals sent to the pins (5)(8) of the EXT-3 external terminal J401?
NO
YES
Are audio signals sent to the pins (1)(7) of IC1402?
NO
Check IC1402 and its peripheral circuits.
YES
Are audio L/R signals sent to the pins (120)(129) of IC1001?
NO
Check IC1001 and its peripheral circuits.

Troubleshooting Table (continued)



No audio output (4) (Sound from external input terminals)

External audio input signals supplied from SCART1 and EXT3 are not heard.

<SCART1>
Is LI1 audio signal supplied from the pin (6) of the input terminal SC1451 to the pin (114) of IC1001?
Is RI1 audio signal supplied from the pin (2) of the input terminal SC1451 to the pin (113) of IC1001?
<EXT3>
Is LI2 audio signal supplied from the J401 terminal to the pin (116) of IC1001?
Is RI2 audio signal supplied from the J401 terminal to the pin (115) of IC1001?

External audio input signals supplied from SCART2 and PC INPUT are not heard.

<SCART2>
Is L audio signal supplied from the pin (6) of the input terminal SC1452 to the pin (15) of IC1401?
Is R audio signal supplied from the pin (2) of the input terminal SC1452 to the pin (2) of IC1401?
<PC-INPUT>
Is L audio signal supplied from the PC-AUDIO CONNECTOR (J402) to the pin (12) of IC1401?
Is R audio signal supplied from the J402 CONNECTOR to the pin (1) of IC1401?

Are audio signals sent to the pins (3)(13) of IC1401?

Check IC1401 and its peripheral circuits.

Are LI3 and RI3 audio signals supplied to the pins (118) and (117) of IC1001 respectively?

External audio input signals supplied from EXT4 are not heard.

<EXT4>
Are audio signals supplied from J1901 to the pins (4)(11) of IC1401?

Check COMPONENT UNIT (J1901) and its peripheral circuits.

Are audio signals sent to the pins (1)(7) of IC1351 normally?

Check IC1351 and its peripheral circuits.

Are audio input signals of the pins (11)(15) of IC1301 (AUDIO-AMP-IC) normal?

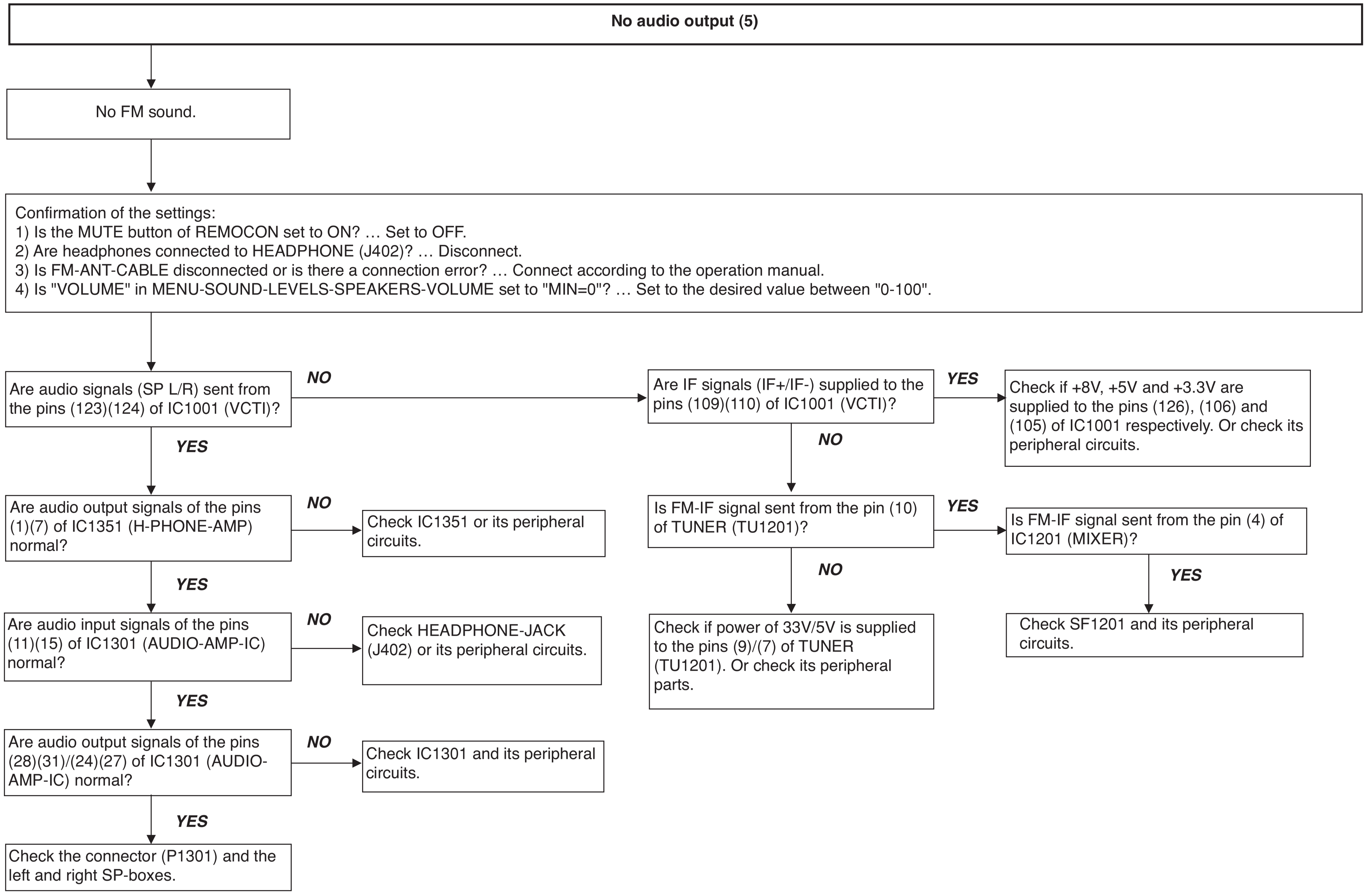
Check HEADPHONE-JACK (J402) or its peripheral circuits.

Are audio output signals of the pins (28)(31)/(24)(27) of IC1301 (AUDIO-AMP-IC) normal?

Check IC1301 and its peripheral circuits.

Check the connector (P1301) and the left and right SP-boxes.

Troubleshooting Table (continued)



No audio output (5)

No FM sound.

Confirmation of the settings:
1) Is the MUTE button of REMOCON set to ON? … Set to OFF.
2) Are headphones connected to HEADPHONE (J402)? … Disconnect.
3) Is FM-ANT-CABLE disconnected or is there a connection error? … Connect according to the operation manual.
4) Is "VOLUME" in MENU-SOUND-LEVELS-SPEAKERS-VOLUME set to "MIN=0"? … Set to the desired value between "0-100".

Are audio signals (SP L/R) sent from the pins (123)(124) of IC1001 (VCTI)?

Are IF signals (IF+/IF-) supplied to the pins (109)(110) of IC1001 (VCTI)?

Check if +8V, +5V and +3.3V are supplied to the pins (126), (106) and (105) of IC1001 respectively. Or check its peripheral circuits.

Are audio output signals of the pins (1)(7) of IC1351 (H-PHONE-AMP) normal?

Check IC1351 or its peripheral circuits.

Is FM-IF signal sent from the pin (10) of TUNER (TU1201)?

Is FM-IF signal sent from the pin (4) of IC1201 (MIXER)?

Are audio input signals of the pins (11)(15) of IC1301 (AUDIO-AMP-IC) normal?

Check HEADPHONE-JACK (J402) or its peripheral circuits.

Check if power of 33V/5V is supplied to the pins (9)/(7) of TUNER (TU1201). Or check its peripheral parts.

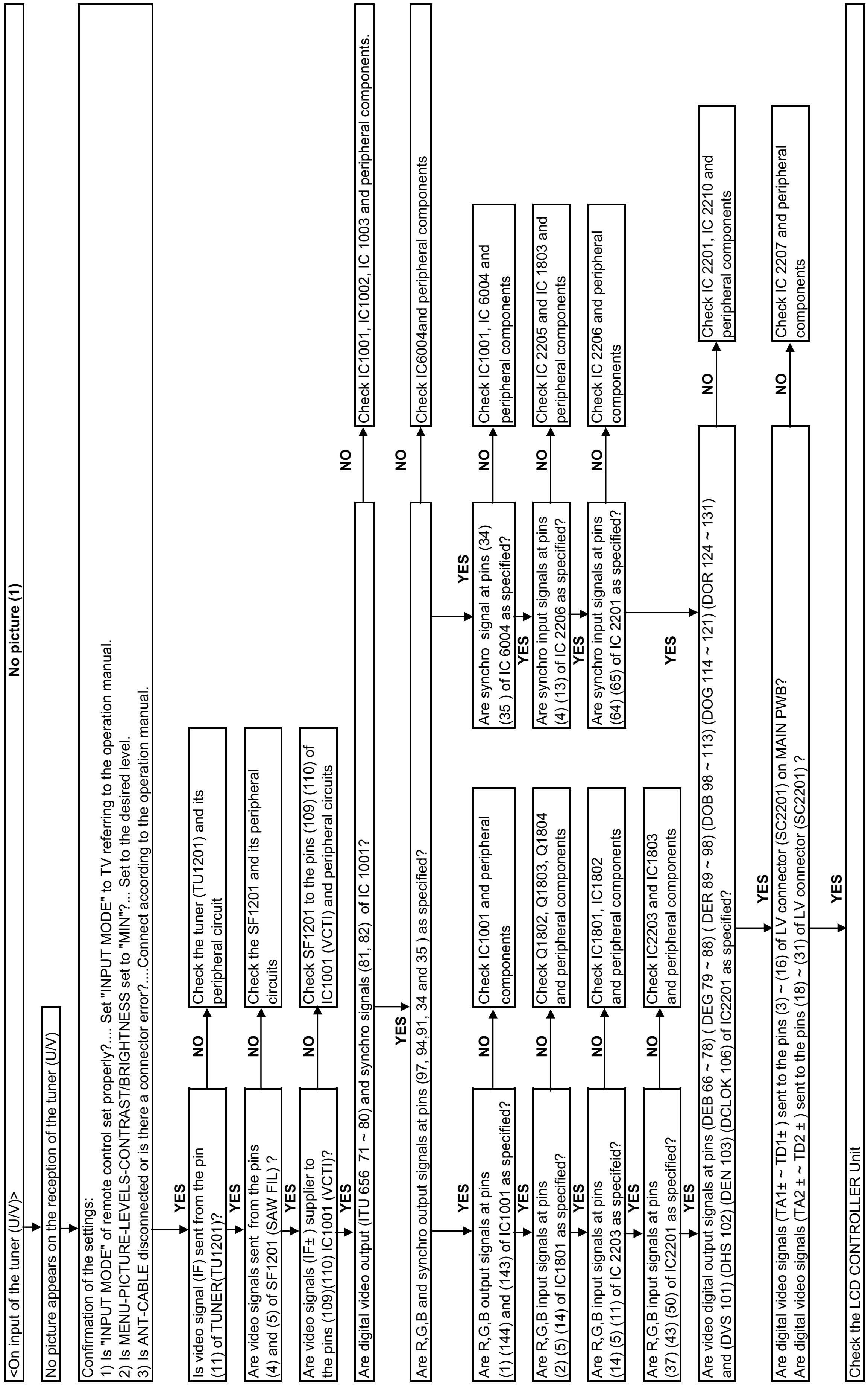
Check SF1201 and its peripheral circuits.

Are audio output signals of the pins (28)(31)/(24)(27) of IC1301 (AUDIO-AMP-IC) normal?

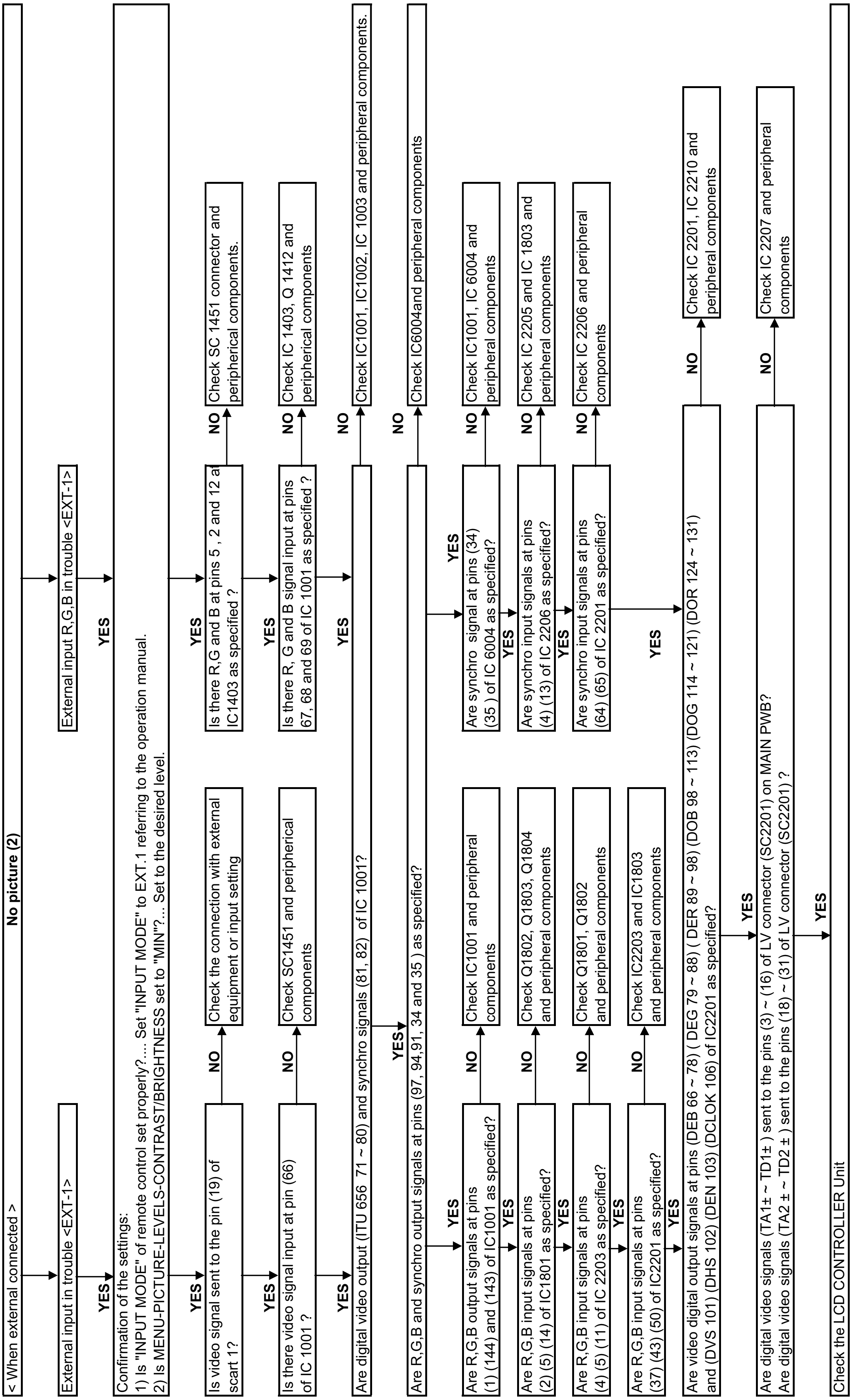
Check IC1301 and its peripheral circuits.

Check the connector (P1301) and the left and right SP-boxes.

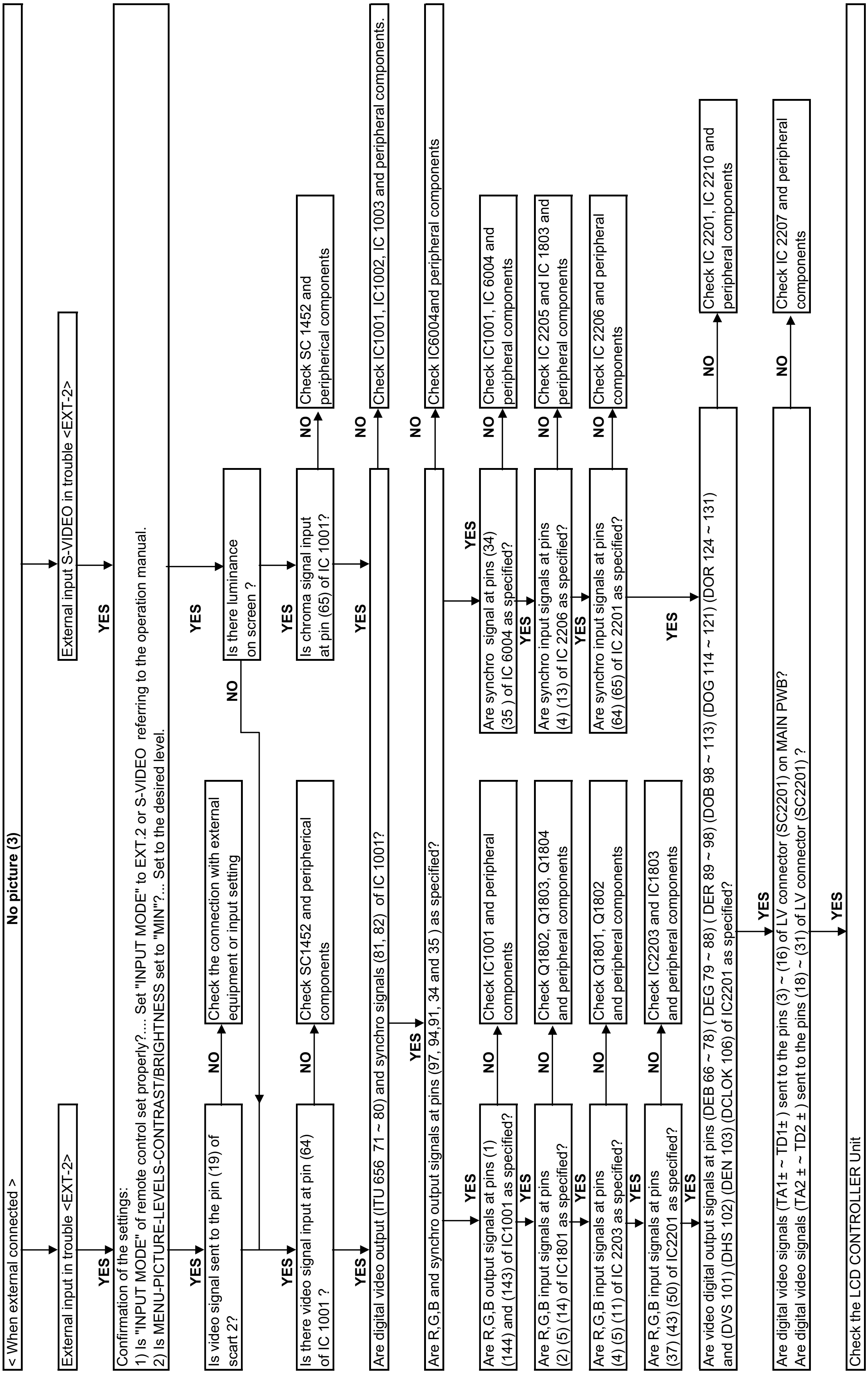
Troubleshooting Table (continued)


No picture (1)
<On input of the tuner (U/V)>
No picture appears on the reception of the tuner (U/V)
Confirmation of the settings:
1) Is "INPUT MODE" of remote control set properly?.... Set "INPUT MODE" to TV referring to the operation manual.
2) Is MENU-PICTURE-LEVELS-CONTRAST/BRIGHTNESS set to "MIN"?... Set to the desired level.
3) Is ANT-CABLE disconnected or is there a connector error?....Connect according to the operation manual.
YES
Is video signal (IF) sent from the pin (11) of TUNER(TU1201)?
NO
Check the tuner (TU1201) and its peripheral circuit
YES
Are video signals sent from the pins (4) and (5) of SF1201 (SAW FIL) ?
NO
Check the SF1201 and its peripheral circuits
YES
Are video signals (IF±) supplier to the pins (109)(110) IC1001 (VCTI)?
NO
Check SF1201 to the pins (109) (110) of IC1001 (VCTI) and peripheral circuits
YES
Are digital video output (ITU 656 71 ~ 80) and synchro signals (81, 82) of IC 1001?
NO
Check IC1001, IC1002, IC 1003 and peripheral components.
YES
Are R,G,B and synchro output signals at pins (97, 94,91, 34 and 35) as specified?
NO
Check IC6004and peripheral components
YES
Are R,G,B output signals at pins (1) (144) and (143) of IC1001 as specified?
NO
Check IC1001 and peripheral components
YES
Are synchro signal at pins (34) (35) of IC 6004 as specified?
NO
Check IC1001, IC 6004 and peripheral components
YES
Are R,G,B input signals at pins (2) (5) (14) of IC1801 as specified?
NO
Check Q1802, Q1803, Q1804 and peripheral components
YES
Are synchro input signals at pins (4) (13) of IC 2206 as specified?
NO
Check IC 2205 and IC 1803 and peripheral components
YES
Are R,G,B input signals at pins (14) (5) (11) of IC 2203 as specifeid?
NO
Check IC1801, IC1802 and peripheral components
YES
Are synchro input signals at pins (64) (65) of IC 2201 as specified?
NO
Check IC 2206 and peripheral components
YES
Are R,G,B input signals at pins (37) (43) (50) of IC2201 as specified?
NO
Check IC2203 and IC1803 and peripheral components
YES
Are video digital output signals at pins (DEB 66 ~ 78) (DEG 79 ~ 88) (DER 89 ~ 98) (DOB 98 ~ 113) (DOG 114 ~ 121) (DOR 124 ~ 131) and (DVS 101) (DHS 102) (DEN 103) (DCLOK 106) of IC2201 as specified?
NO
Check IC 2201, IC 2210 and peripheral components
YES
Are digital video signals (TA1± ~ TD1±) sent to the pins (3) ~ (16) of LV connector (SC2201) on MAIN PWB?
Are digital video signals (TA2 ± ~ TD2 ±) sent to the pins (18) ~ (31) of LV connector (SC2201) ?
NO
Check IC 2207 and peripheral components
YES
Check the LCD CONTROLLER Unit

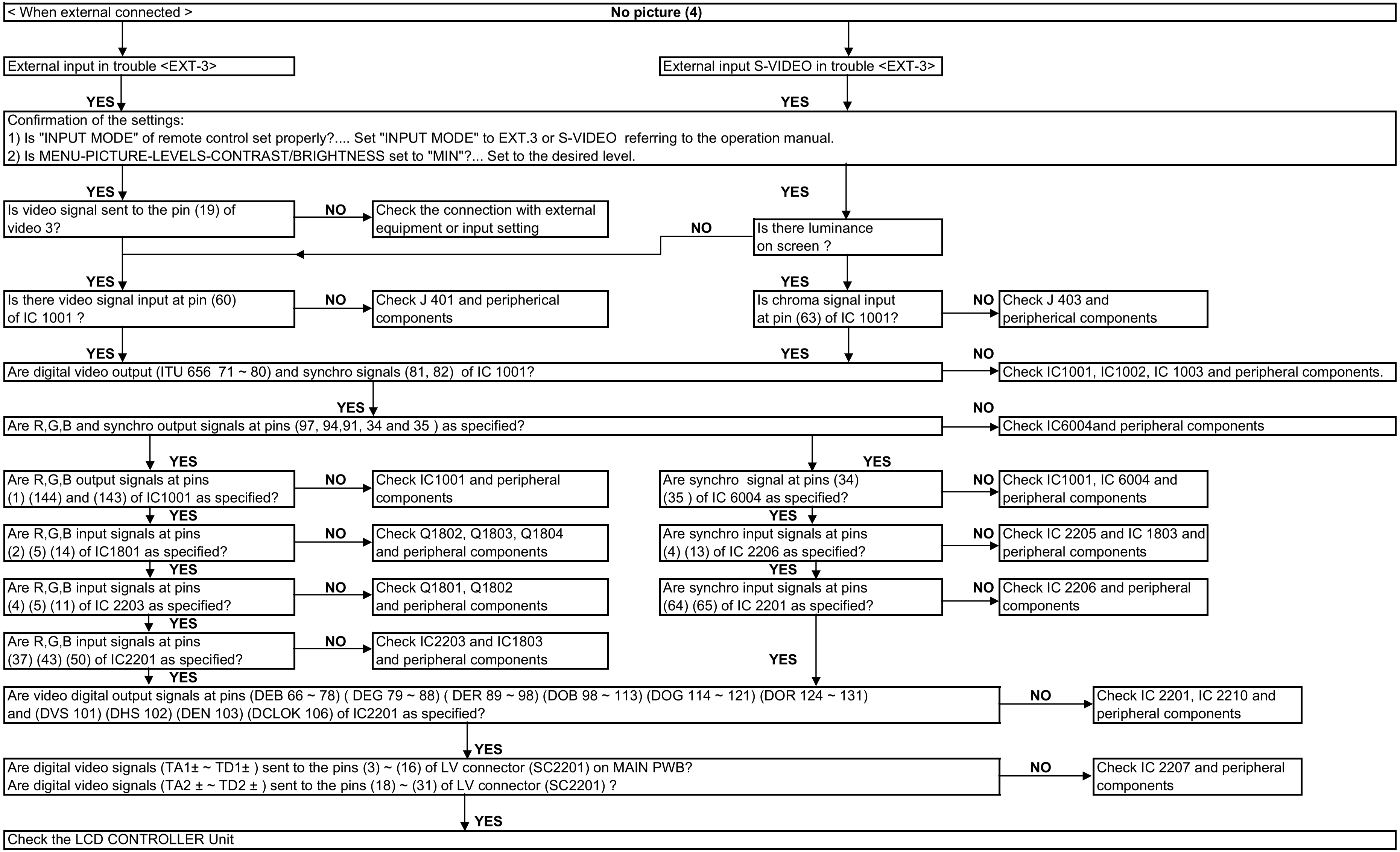
Troubleshooting Table (continued)


No picture (2)
< When external connected >
YES
External input in trouble <EXT-1>
External input R,G,B in trouble <EXT-1>
YES
Confirmation of the settings:
1) Is "INPUT MODE" of remote control set properly?.... Set "INPUT MODE" to EXT.1 referring to the operation manual.
2) Is MENU-PICTURE-LEVELS-CONTRAST/BRIGHTNESS set to "MIN"?... Set to the desired level.
YES
Is video signal sent to the pin (19) of scart 1?
NO
Check the connection with external equipment or input setting
YES
Is there video signal input at pin (66) of IC 1001 ?
NO
Check SC1451 and peripherical components
YES
Is there R,G and B at pins 5 , 2 and 12 a IC1403 as specified ?
NO
Check SC 1451 connector and peripherical components.
YES
Is there R, G and B signal input at pins 67, 68 and 69 of IC 1001 as specified ?
NO
Check IC 1403, Q 1412 and peripherical components
YES
Are digital video output (ITU 656 71 ~ 80) and synchro signals (81, 82) of IC 1001?
NO
Check IC1001, IC1002, IC 1003 and peripheral components.
YES
Are R,G,B and synchro output signals at pins (97, 94,91, 34 and 35) as specified?
NO
Check IC6004and peripheral components
YES
Are R,G,B output signals at pins (1) (144) and (143) of IC1001 as specified?
NO
Check IC1001 and peripheral components
YES
Are synchro signal at pins (34) (35) of IC 6004 as specified?
NO
Check IC1001, IC 6004 and peripheral components
YES
Are R,G,B input signals at pins (2) (5) (14) of IC1801 as specified?
NO
Check Q1802, Q1803, Q1804 and peripheral components
YES
Are synchro input signals at pins (4) (13) of IC 2206 as specified?
NO
Check IC 2205 and IC 1803 and peripheral components
YES
Are R,G,B input signals at pins (4) (5) (11) of IC 2203 as specified?
NO
Check Q1801, Q1802 and peripheral components
YES
Are synchro input signals at pins (64) (65) of IC 2201 as specified?
NO
Check IC 2206 and peripheral components
YES
Are R,G,B input signals at pins (37) (43) (50) of IC2201 as specified?
NO
Check IC2203 and IC1803 and peripheral components
YES
Are video digital output signals at pins (DEB 66 ~ 78) (DEG 79 ~ 88) (DER 89 ~ 98) (DOB 98 ~ 113) (DOG 114 ~ 121) (DOR 124 ~ 131) and (DVS 101) (DHS 102) (DEN 103) (DCLOK 106) of IC2201 as specified?
NO
Check IC 2201, IC 2210 and peripheral components
YES
Are digital video signals (TA1± ~ TD1±) sent to the pins (3) ~ (16) of LV connector (SC2201) on MAIN PWB?
Are digital video signals (TA2 ± ~ TD2 ±) sent to the pins (18) ~ (31) of LV connector (SC2201) ?
NO
Check IC 2207 and peripheral components
YES
Check the LCD CONTROLLER Unit

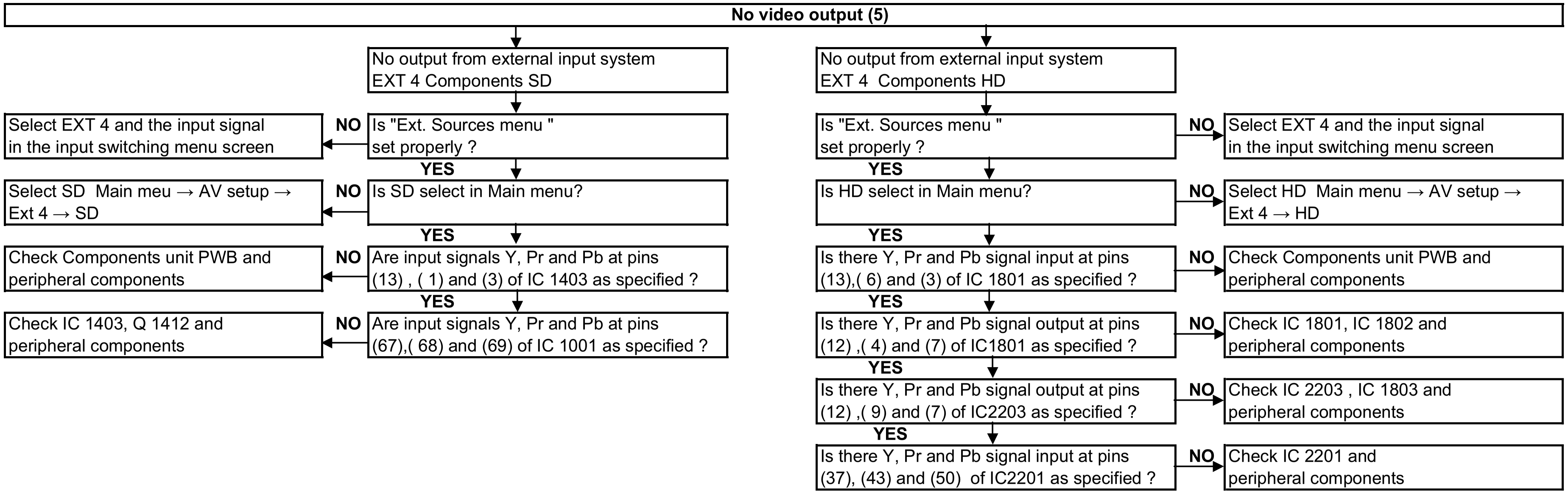
Troubleshooting Table (continued)

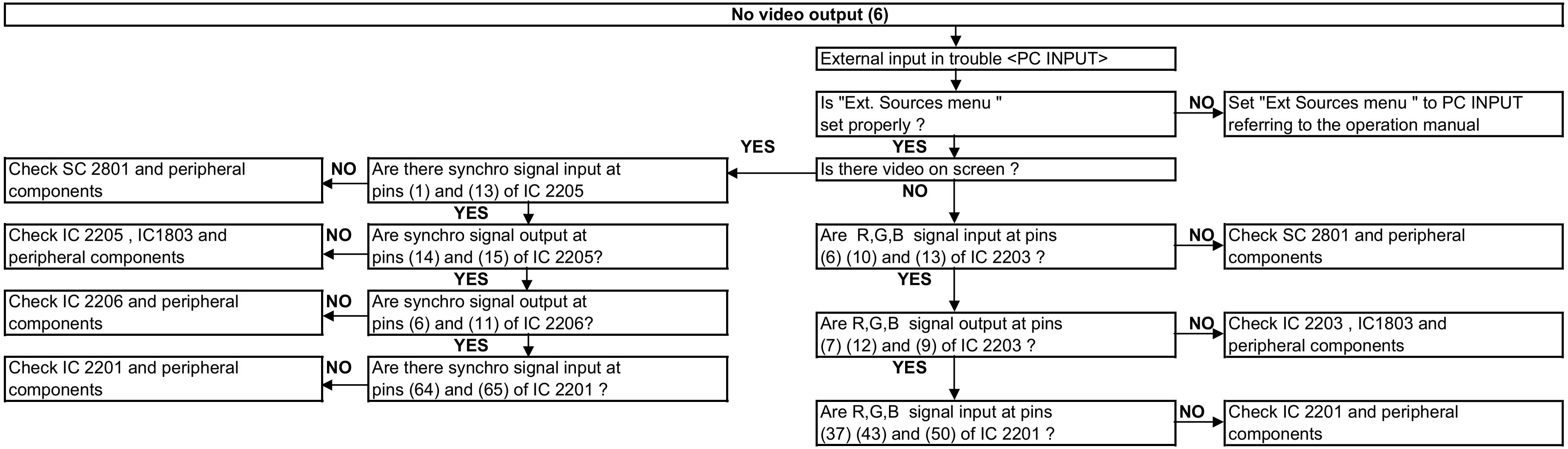

< When external connected >
No picture (3)
External input in trouble <EXT-2>
External input S-VIDEO in trouble <EXT-2>
YES
YES
Confirmation of the settings:
1) Is "INPUT MODE" of remote control set properly?.... Set "INPUT MODE" to EXT.2 or S-VIDEO referring to the operation manual.
2) Is MENU-PICTURE-LEVELS-CONTRAST/BRIGHTNESS set to "MIN"?... Set to the desired level.
YES
YES
Is video signal sent to the pin (19) of scart 2?
NO
Check the connection with external equipment or input setting
Is there luminance on screen ?
NO
YES
Is there video signal input at pin (64) of IC 1001 ?
NO
Check SC1452 and peripherical components
Is chroma signal input at pin (65) of IC 1001?
NO
Check SC 1452 and peripherical components
YES
YES
Are digital video output (ITU 656 71 ~ 80) and synchro signals (81, 82) of IC 1001?
NO
Check IC1001, IC1002, IC 1003 and peripheral components.
YES
Are R,G,B and synchro output signals at pins (97, 94,91, 34 and 35) as specified?
NO
Check IC6004and peripheral components
YES
YES
Are R,G,B output signals at pins (1) (144) and (143) of IC1001 as specified?
NO
Check IC1001 and peripheral components
Are synchro signal at pins (34) (35) of IC 6004 as specified?
NO
Check IC1001, IC 6004 and peripheral components
YES
YES
Are R,G,B input signals at pins (2) (5) (14) of IC1801 as specified?
NO
Check Q1802, Q1803, Q1804 and peripheral components
Are synchro input signals at pins (4) (13) of IC 2206 as specified?
NO
Check IC 2205 and IC 1803 and peripheral components
YES
YES
Are R,G,B input signals at pins (4) (5) (11) of IC 2203 as specified?
NO
Check Q1801, Q1802 and peripheral components
Are synchro input signals at pins (64) (65) of IC 2201 as specified?
NO
Check IC 2206 and peripheral components
YES
Are R,G,B input signals at pins (37) (43) (50) of IC2201 as specified?
NO
Check IC2203 and IC1803 and peripheral components
YES
YES
Are video digital output signals at pins (DEB 66 ~ 78) (DEG 79 ~ 88) (DER 89 ~ 98) (DOB 98 ~ 113) (DOG 114 ~ 121) (DOR 124 ~ 131) and (DVS 101) (DHS 102) (DEN 103) (DCLOK 106) of IC2201 as specified?
NO
Check IC 2201, IC 2210 and peripheral components
YES
Are digital video signals (TA1± ~ TD1±) sent to the pins (3) ~ (16) of LV connector (SC2201) on MAIN PWB?
Are digital video signals (TA2 ± ~ TD2 ±) sent to the pins (18) ~ (31) of LV connector (SC2201) ?
NO
Check IC 2207 and peripheral components
YES
Check the LCD CONTROLLER Unit

Troubleshooting Table (continued)

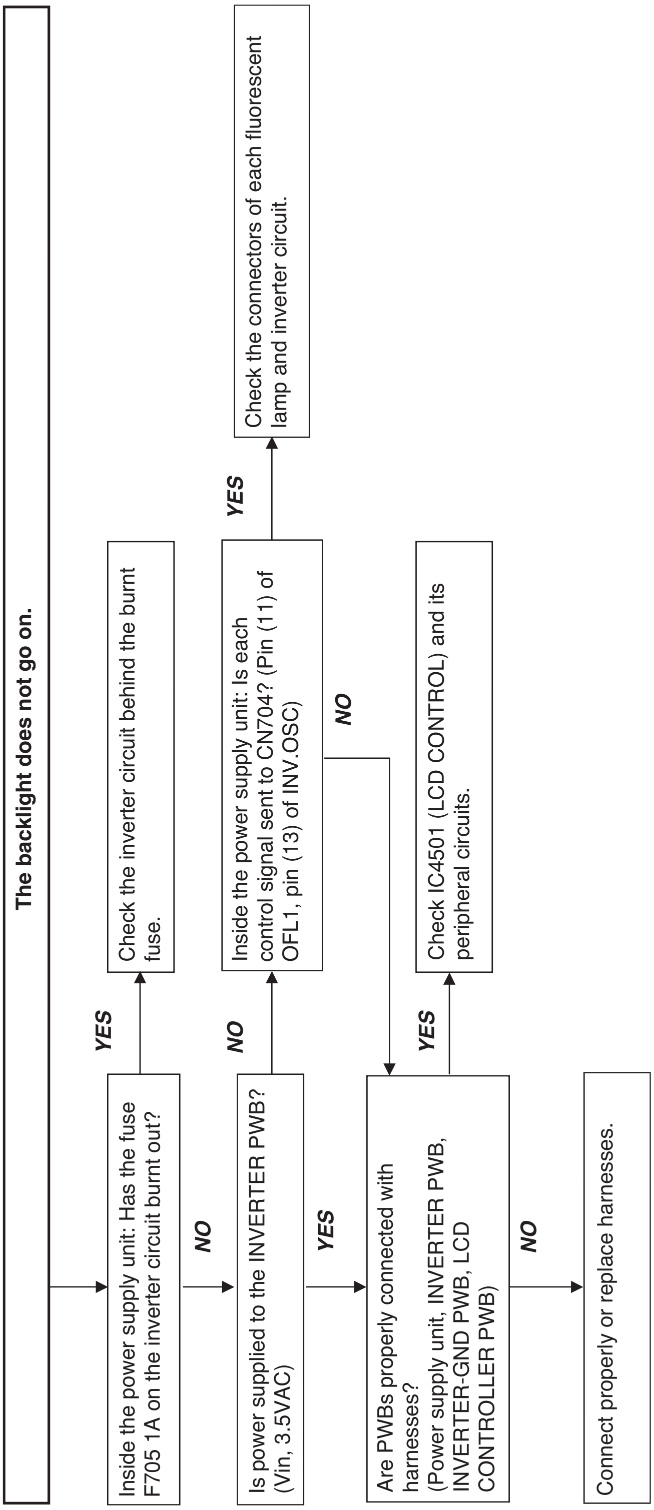

< When external connected >
No picture (4)
External input in trouble <EXT-3>
External input S-VIDEO in trouble <EXT-3>
YES
YES
Confirmation of the settings:
1) Is "INPUT MODE" of remote control set properly?.... Set "INPUT MODE" to EXT.3 or S-VIDEO referring to the operation manual.
2) Is MENU-PICTURE-LEVELS-CONTRAST/BRIGHTNESS set to "MIN"?... Set to the desired level.
YES
YES
Is video signal sent to the pin (19) of video 3?
NO
Check the connection with external equipment or input setting
NO
Is there luminance on screen ?
YES
YES
Is there video signal input at pin (60) of IC 1001 ?
NO
Check J 401 and peripherical components
Is chroma signal input at pin (63) of IC 1001?
NO
Check J 403 and peripherical components
YES
YES
NO
Are digital video output (ITU 656 71 ~ 80) and synchro signals (81, 82) of IC 1001?
Check IC1001, IC1002, IC 1003 and peripheral components.
YES
NO
Are R,G,B and synchro output signals at pins (97, 94,91, 34 and 35) as specified?
Check IC6004and peripheral components
YES
YES
Are R,G,B output signals at pins (1) (144) and (143) of IC1001 as specified?
NO
Check IC1001 and peripheral components
Are synchro signal at pins (34) (35) of IC 6004 as specified?
NO
Check IC1001, IC 6004 and peripheral components
YES
YES
Are R,G,B input signals at pins (2) (5) (14) of IC1801 as specified?
NO
Check Q1802, Q1803, Q1804 and peripheral components
Are synchro input signals at pins (4) (13) of IC 2206 as specified?
NO
Check IC 2205 and IC 1803 and peripheral components
YES
YES
Are R,G,B input signals at pins (4) (5) (11) of IC 2203 as specified?
NO
Check Q1801, Q1802 and peripheral components
Are synchro input signals at pins (64) (65) of IC 2201 as specified?
NO
Check IC 2206 and peripheral components
YES
Are R,G,B input signals at pins (37) (43) (50) of IC2201 as specified?
NO
Check IC2203 and IC1803 and peripheral components
YES
YES
Are video digital output signals at pins (DEB 66 ~ 78) (DEG 79 ~ 88) (DER 89 ~ 98) (DOB 98 ~ 113) (DOG 114 ~ 121) (DOR 124 ~ 131) and (DVS 101) (DHS 102) (DEN 103) (DCLOK 106) of IC2201 as specified?
NO
Check IC 2201, IC 2210 and peripheral components
YES
Are digital video signals (TA1± ~ TD1±) sent to the pins (3) ~ (16) of LV connector (SC2201) on MAIN PWB?
Are digital video signals (TA2 ± ~ TD2 ±) sent to the pins (18) ~ (31) of LV connector (SC2201) ?
NO
Check IC 2207 and peripheral components
YES
Check the LCD CONTROLLER Unit

Troubleshooting Table (continued)


No video output (5)
No output from external input system EXT 4 Components SD
Is "Ext. Sources menu " set properly ?
NO
Select EXT 4 and the input signal in the input switching menu screen
YES
Is SD select in Main menu?
NO
Select SD Main meu → AV setup → Ext 4 → SD
YES
Are input signals Y, Pr and Pb at pins (13) , (1) and (3) of IC 1403 as specified ?
NO
Check Components unit PWB and peripheral components
YES
Are input signals Y, Pr and Pb at pins (67),(68) and (69) of IC 1001 as specified ?
NO
Check IC 1403, Q 1412 and peripheral components
No output from external input system EXT 4 Components HD
Is "Ext. Sources menu " set properly ?
NO
Select EXT 4 and the input signal in the input switching menu screen
YES
Is HD select in Main menu?
NO
Select HD Main menu → AV setup → Ext 4 → HD
YES
Is there Y, Pr and Pb signal input at pins (13),(6) and (3) of IC 1801 as specified ?
NO
Check Components unit PWB and peripheral components
YES
Is there Y, Pr and Pb signal output at pins (12) ,(4) and (7) of IC1801 as specified ?
NO
Check IC 1801, IC 1802 and peripheral components
YES
Is there Y, Pr and Pb signal output at pins (12) ,(9) and (7) of IC2203 as specified ?
NO
Check IC 2203 , IC 1803 and peripheral components
YES
Is there Y, Pr and Pb signal input at pins (37), (43) and (50) of IC2201 as specified ?
NO
Check IC 2201 and peripheral components

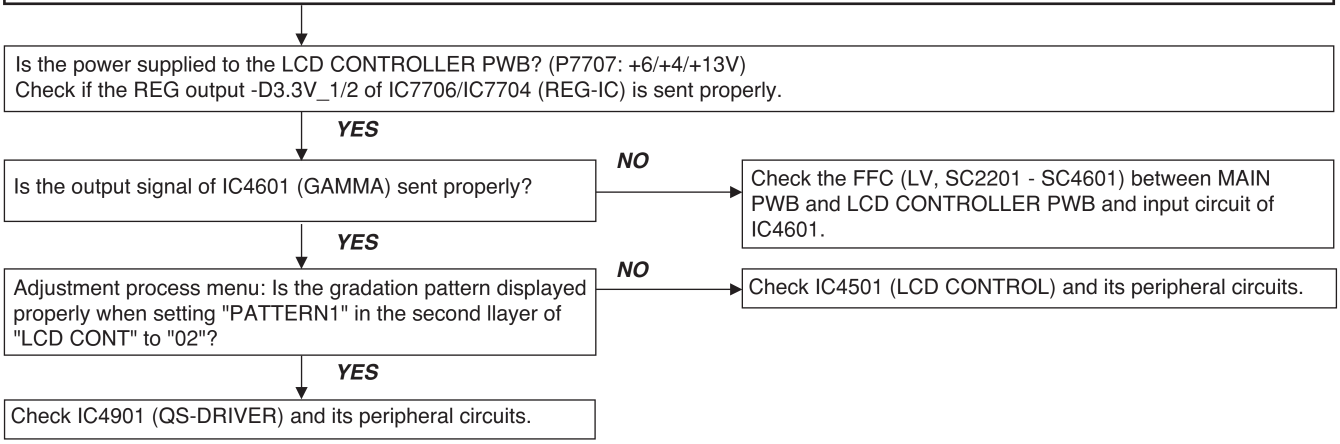

No video output (6)
External input in trouble <PC INPUT>
Is "Ext. Sources menu " set properly ?
NO
Set "Ext Sources menu " to PC INPUT referring to the operation manual
YES
Is there video on screen ?
YES
Are there synchro signal input at pins (1) and (13) of IC 2205
NO
Check SC 2801 and peripheral components
YES
Are synchro signal output at pins (14) and (15) of IC 2205?
NO
Check IC 2205 , IC1803 and peripheral components
YES
Are synchro signal output at pins (6) and (11) of IC 2206?
NO
Check IC 2206 and peripheral components
YES
Are there synchro signal input at pins (64) and (65) of IC 2201 ?
NO
Check IC 2201 and peripheral components
NO
Are R,G,B signal input at pins (6) (10) and (13) of IC 2203 ?
NO
Check SC 2801 and peripheral components
YES
Are R,G,B signal output at pins (7) (12) and (9) of IC 2203 ?
NO
Check IC 2203 , IC1803 and peripheral components
YES
Are R,G,B signal input at pins (37) (43) and (50) of IC 2201 ?
NO
Check IC 2201 and peripheral components

Troubleshooting Table (continued)

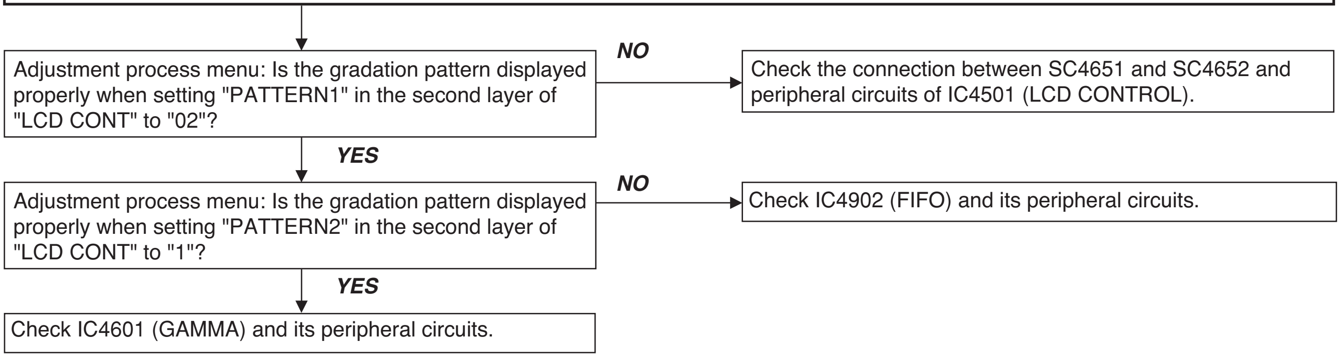

The backlight does not go on.
Inside the power supply unit: Has the fuse F705 1A on the inverter circuit burnt out?
YES
Check the inverter circuit behind the burnt fuse.
NO
Is power supplied to the INVERTER PWB? (Vin, 3.5VAC)
NO
Inside the power supply unit: Is each control signal sent to CN704? (Pin (11) of OFL1, pin (13) of INV.OSC)
YES
Check the connectors of each fluorescent lamp and inverter circuit.
NO
YES
Are PWBs properly connected with harnesses? (Power supply unit, INVERTER PWB, INVERTER-GND PWB, LCD CONTROLLER PWB)
YES
Check IC4501 (LCD CONTROL) and its peripheral circuits.
NO
Connect properly or replace harnesses.

Troubleshooting Table (continued)

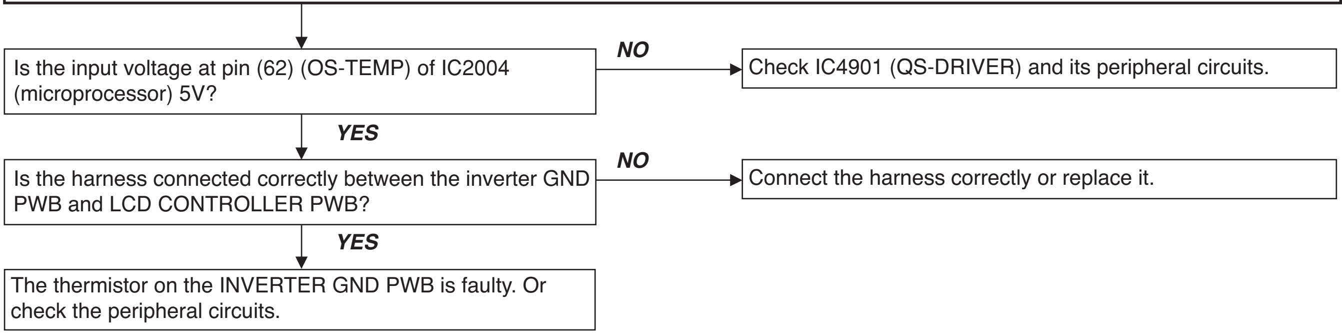
No picture in the LCD section


Is the power supplied to the LCD CONTROLLER PWB? (P7707: +6/+4/+13V)
Check if the REG output -D3.3V_1/2 of IC7706/IC7704 (REG-IC) is sent properly.
YES
Is the output signal of IC4601 (GAMMA) sent properly?
NO
Check the FFC (LV, SC2201 - SC4601) between MAIN PWB and LCD CONTROLLER PWB and input circuit of IC4601.
YES
Adjustment process menu: Is the gradation pattern displayed properly when setting "PATTERN1" in the second llayer of "LCD CONT" to "02"?
NO
Check IC4501 (LCD CONTROL) and its peripheral circuits.
YES
Check IC4901 (QS-DRIVER) and its peripheral circuits.

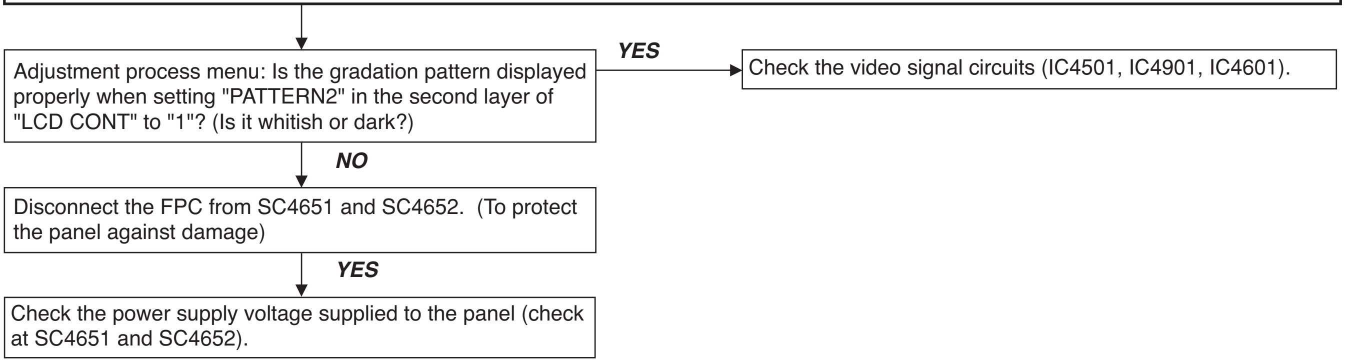
Data bit drop (gradation-related)


Adjustment process menu: Is the gradation pattern displayed properly when setting "PATTERN1" in the second layer of "LCD CONT" to "02"?
NO
Check the connection between SC4651 and SC4652 and peripheral circuits of IC4501 (LCD CONTROL).
YES
Adjustment process menu: Is the gradation pattern displayed properly when setting "PATTERN2" in the second layer of "LCD CONT" to "1"?
NO
Check IC4902 (FIFO) and its peripheral circuits.
YES
Check IC4601 (GAMMA) and its peripheral circuits.

Noise is caused to the moving picture with the QS drive on.

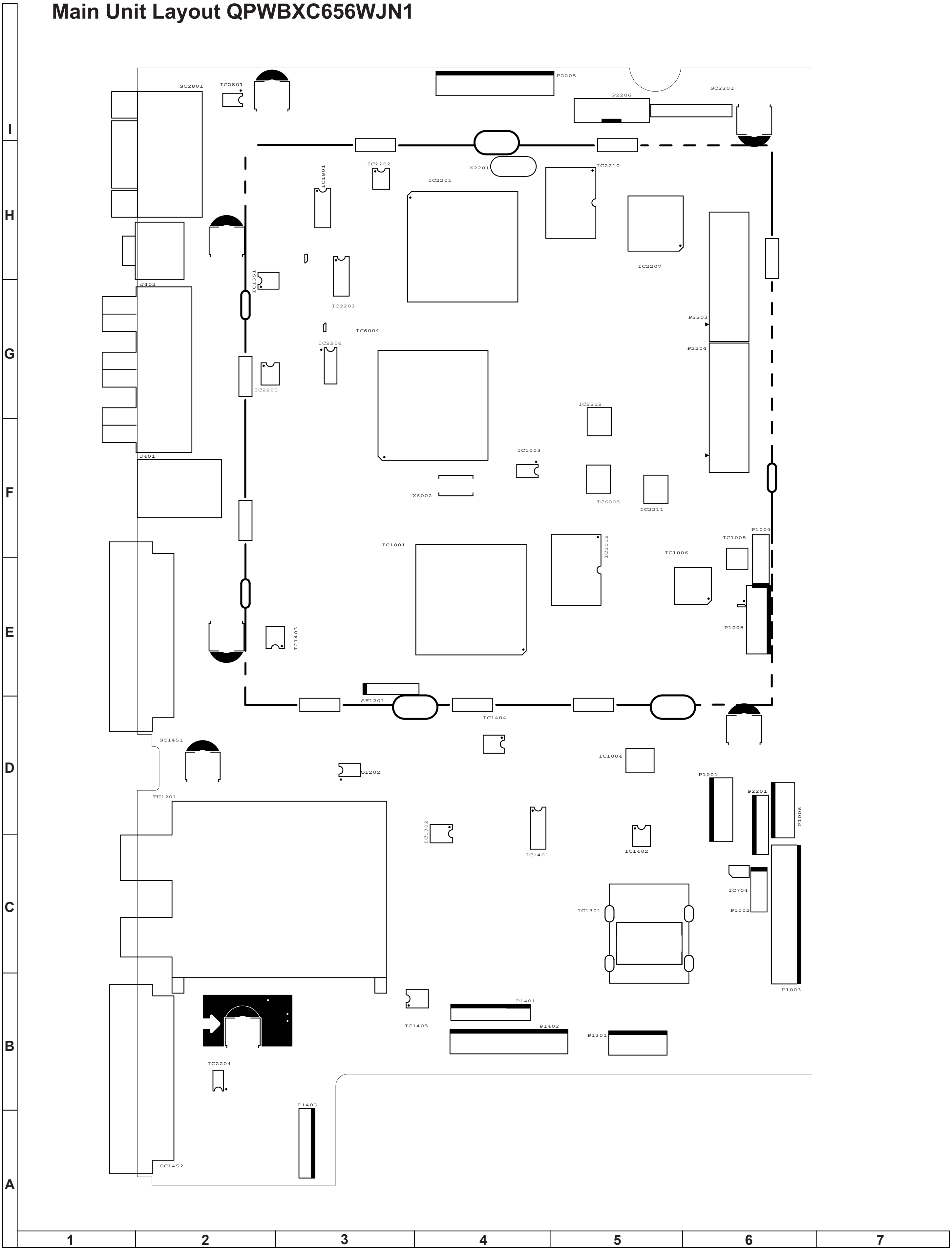

Is the input voltage at pin (62) (OS-TEMP) of IC2004 (microprocessor) 5V?
NO
Check IC4901 (QS-DRIVER) and its peripheral circuits.
YES
Is the harness connected correctly between the inverter GND PWB and LCD CONTROLLER PWB?
NO
Connect the harness correctly or replace it.
YES
The thermistor on the INVERTER GND PWB is faulty. Or check the peripheral circuits.

The whole screen is whitish (LCD power supply).

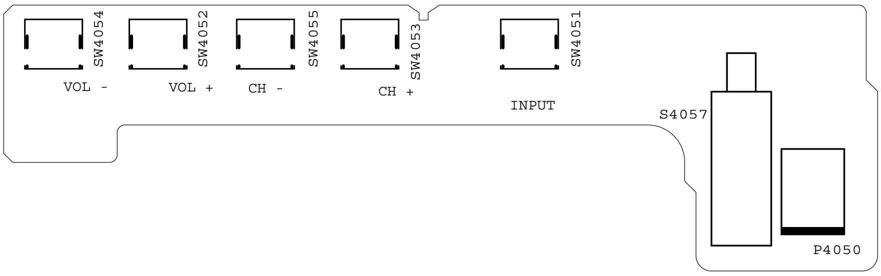

Adjustment process menu: Is the gradation pattern displayed properly when setting "PATTERN2" in the second layer of "LCD CONT" to "1"? (Is it whitish or dark?)
YES
Check the video signal circuits (IC4501, IC4901, IC4601).
NO
Disconnect the FPC from SC4651 and SC4652. (To protect the panel against damage)
YES
Check the power supply voltage supplied to the panel (check at SC4651 and SC4652).

CHASSIS LAYOUT

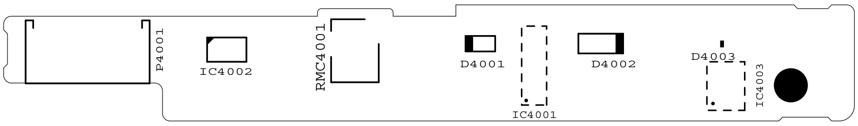
Main Unit Layout QPWBXC656WJN1


I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
SC2801
IC2801
P2205
P2206
SC2201
IC2202
X2201
IC2210
IC1801
IC2201
IC2207
J402
IC1351
IC2203
P2203
IC6004
IC2206
P2204
IC2205
IC2212
J401
IC1003
X6002
IC6008
IC2211
P1004
IC1008
IC1001
IC1002
IC1006
IC1403
P1005
SF1201
IC1404
SC1451
IC1004
Q1202
P1001
TU1201
P2201
P1006
IC1302
IC1401
IC1402
IC704
IC1301
P1002
P1003
P1401
IC1405
P1402
P1301
IC2204
P1403
SC1452

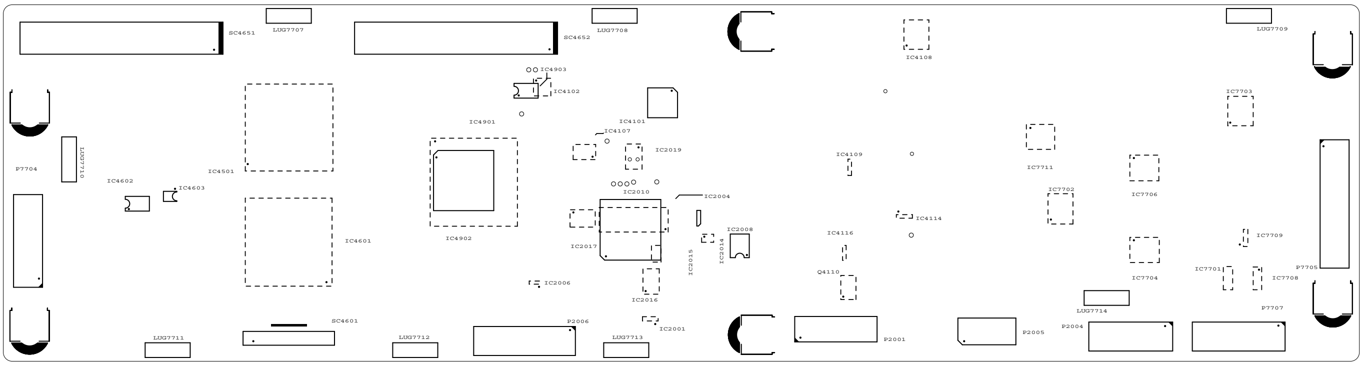
Operation Unit Layout QPWBXC864WJN1


SW4054
VOL -
SW4052
VOL +
SW4055
CH -
SW4053
CH +
SW4051
INPUT
S4057
P4050

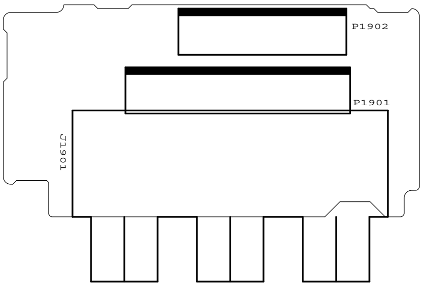
RC / LED Unit Layout QPWBXC865WJN1


P4001
IC4002
RMC4001
D4001
IC4001
D4002
D4003
IC4003

LCD Control Unit Layout QPWBXC919WJN1


SC4651
LUG7707
SC4652
LUG7708
IC4108
LUG7709
IC4903
IC4102
IC4901
IC4101
IC4107
IC2019
IC7703
LUG7710
P7704
IC4501
IC4602
IC4603
IC4109
IC7711
IC2010
IC2004
IC7702
IC7706
IC4114
IC4601
IC4902
IC2017
IC2008
IC4116
IC7709
IC2015
IC2014
P7705
Q4110
IC2006
IC7701
IC7704
IC7708
IC2016
LUG7714
P7707
SC4601
P2006
P2004
IC2001
LUG7711
LUG7712
LUG7713
P2001
P2005

YUV Unit Layout QPWBXC920WJN1

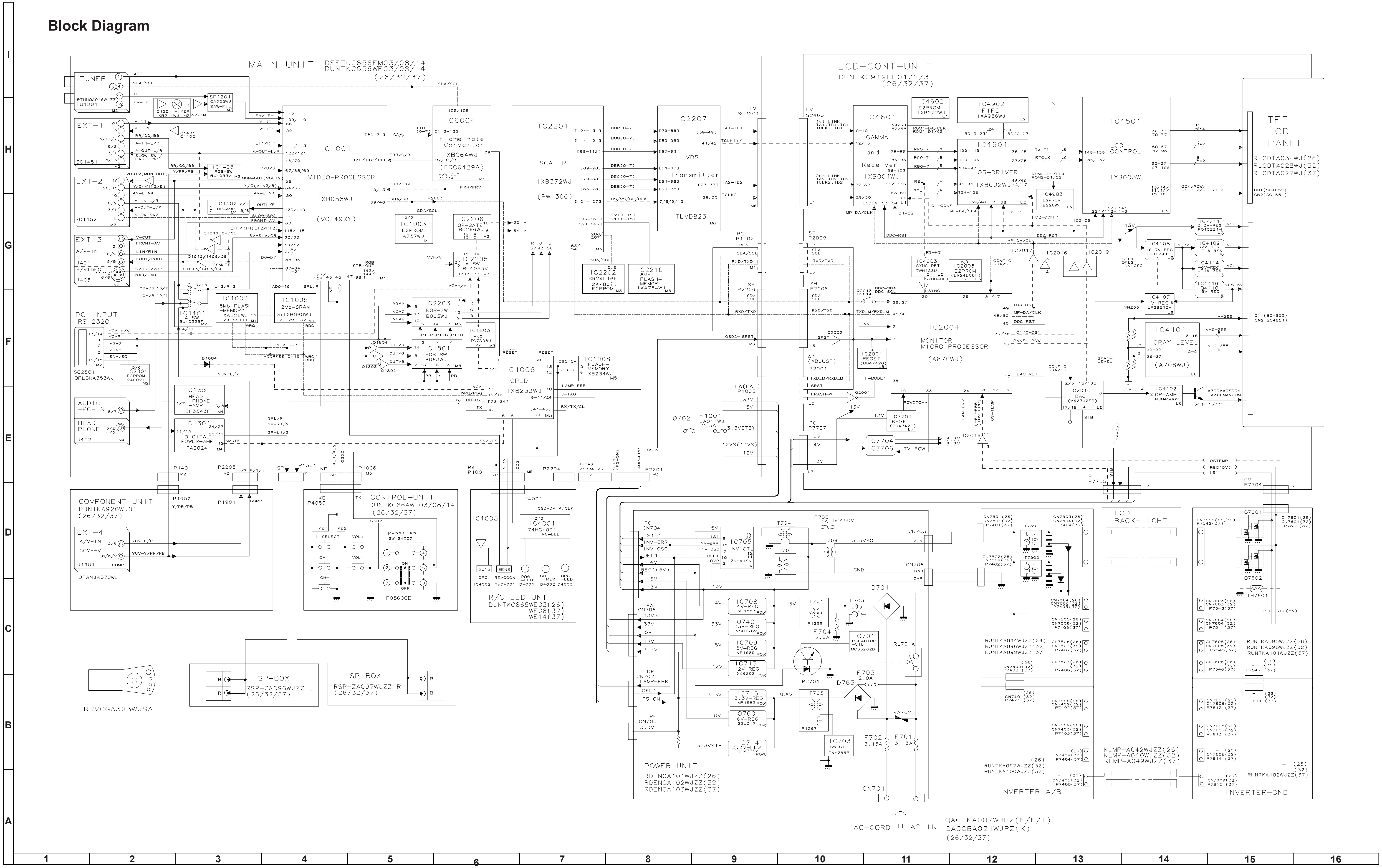

P1902
P1901
J1901

I
H
G
F
E
D
C
B
A

1 2 3 4 5 6 7

BLOCK DIAGRAMS

Block Diagram


MAIN-UNIT DSETUC656FM03/08/14 DUNTKC656WE03/08/14 (26/32/37)
TUNER
RTUNQA016WJZZ TU1201
SF1201 CA025WJ SAW-FIL
IC1201 MIXER IXB244WJ
EXT-1
SC1451
EXT-2
SC1452
EXT-3
A/V-IN
J401
S/VIDEO
J403
IC1403 RGB-SW BU4053V
IC1402 OP-AMP
Q1011/04/05
Q1012/1406/08
Q1013/1403/04
IC1001 VIDEO-PROCESSOR IXB058WJ (VCT49XY)
IC6004 Flame Rate -Converter IXB064WJ (FRC9429A)
IC1003 E2PROM A757WJ
IC2206 OR-GATE BU266WJ
IC2205 A-SW BU4053V
IC2201 SCALER IXB372WJ (PW1306)
IC2207 LVDS Transmitter TLVD823
IC2202 BR24L16F 2K×8bit E2PROM
IC2210 8Mb FLASH-MEMORY IXA764WJ
PC-INPUT RS-232C
SC2801 QPLGNA353WJ
IC2801 E2PROM 24LC21
IC1401 A-SW BU4052BF
IC1002 8Mb-FLASH -MEMORY IXA826WJ
IC1005 2Mb-SRAM IXB060WJ
IC2203 RGB-SW BU63WJ
IC1801 RGB-SW BU63WJ
IC1803 AND TC7S08U
IC1006 CPLD IXB233WJ
IC1008 FLASH-MEMORY IXB234WJ
D1804
AUDIO -PC-IN
HEAD PHONE
J402
IC1351 HEAD -PHONE -AMP BH3543F
IC1301 DIGITAL POWER-AMP TA2024
Q702
F1001 LA011WJ 2.5A
P1401
P2205
P1301
P1006
P1001
P2204
P1004
P2201
COMPONENT-UNIT RUNTKA920WJ01 (26/32/37)
EXT-4
A/V-IN
COMP-V
J1901
QTANJA070WJ
P1902
P1901
CONTROL-UNIT DUNTKC864WE03/08/14 (26/32/37)
P4050
IN SELECT
CH+
CH-
VOL+
VOL-
power sw SW S4057
ON
OFF
P0560CE
IC4003
P4001
IC4001 74HC4094 RC-LED
SENS
OPC IC4002
REMOCON RMC4001
POW -LED D4001
ON TIMER D4002
OPC -LED D4003
R/C LED UNIT DUNTKC865WE03(26) WE08(32) WE14(37)
SP-BOX RSP-ZA096WJZZ L (26/32/37)
SP-BOX RSP-ZA097WJZZ R (26/32/37)
RRMCGA323WJSA
LCD-CONT-UNIT DUNTKC919FE01/2/3 (26/32/37)
SC4601
IC4602 E2PROM IXB272WJ
IC4902 FIFO IXA986WJ
IC4601 GAMMA and Receiver IXB001WJ
IC4901 QS-DRIVER IXB002WJ
IC4903 E2PROM B228WJ
IC4501 LCD CONTROL IXB003WJ
TFT LCD PANEL
RLCDTA034WJ(26)
RLCDTA028WJ(32)
RLCDTA027WJ(37)
IC7711 3.3V-REG PQ1CZ21H
IC4108 +6.7V-REG PQ1CZ41H
IC4109 32V-REG LT1615ES
IC4114 -6V-REG LT1617ES
IC4116 Q4110 15V-REG
IC4107 V-REG LP2951CM
IC4101 GRAY-LEVEL (A706WJ)
IC4102 OP-AMP NJM4580V
Q4101/12
IC4603 SYNC-DET 7WH123U
IC2008 E2PROM (BR24L08F)
IC2017
IC2016
IC2019
IC2004 MONITOR MICRO PROCESSOR (A870WJ)
IC2001 RESET (BD4742G)
IC2010 DAC (M62392FP)
IC7709 RESET (BD4742G)
IC7704
IC7706
Q2002
Q2004
ST P2005
SH P2006
AD (ADJUST) P2001
PW(PA7) P1003
PO P7707
BL P7705
GV P7704
LV SC2201
PC P1002
SH P2206
POWER-UNIT RDENCA101WJZZ(26) RDENCA102WJZZ(32) RDENCA103WJZZ(37)
PO CN704
IC705 INV-CTL OZ9641SN
T704
T705
T706
F705 1A DC450V
CN703
CN708
D701
PA CN706
IC708 4V-REG MP1583
Q740 33V-REG 2SD1782
IC709 5V-REG MP1580
IC713 12V-REG XC6202
T701
L703
F704 2.0A
IC701 P-FACTOR -CTL MC33262D
RL701A
PC701
D763
F703 2.0A
OP CN707
PE CN705
IC715 3.3V-REG MP1583
Q760 6V-REG 2SJ317
IC714 3.3V-REG PQ1M335M
T703
IC703 SW-CTL TNY266P
VA702
F702 3.15A
F701 3.15A
CN701
AC-CORD
AC-IN
QACCKA007WJPZ(E/F/I) QACCBA021WJPZ(K) (26/32/37)
T7501
T7502
RUNTKA094WJZZ(26) RUNTKA096WJZZ(32) RUNTKA099WJZZ(37)
RUNTKA097WJZZ(32) RUNTKA100WJZZ(37)
INVERTER-A/B
LCD BACK-LIGHT
KLMP-A042WJZZ(26) KLMP-A040WJZZ(32) KLMP-A049WJZZ(37)
Q7601
Q7602
TH7601
RUNTKA095WJZZ(26) RUNTKA098WJZZ(32) RUNTKA101WJZZ(37)
RUNTKA102WJZZ(37)
INVERTER-GND
I
H
G
F
E
D
C
B
A
1
2
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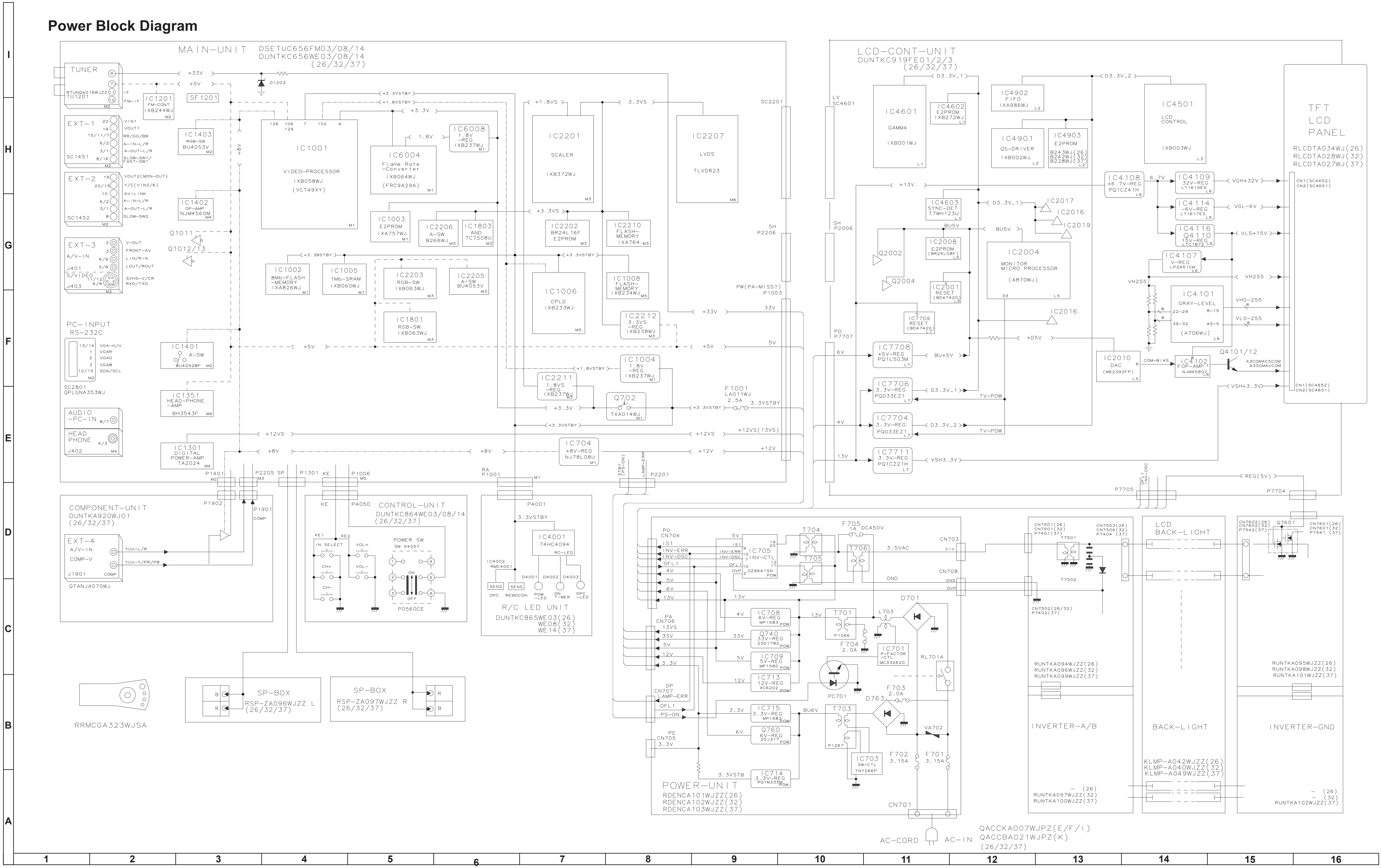
16

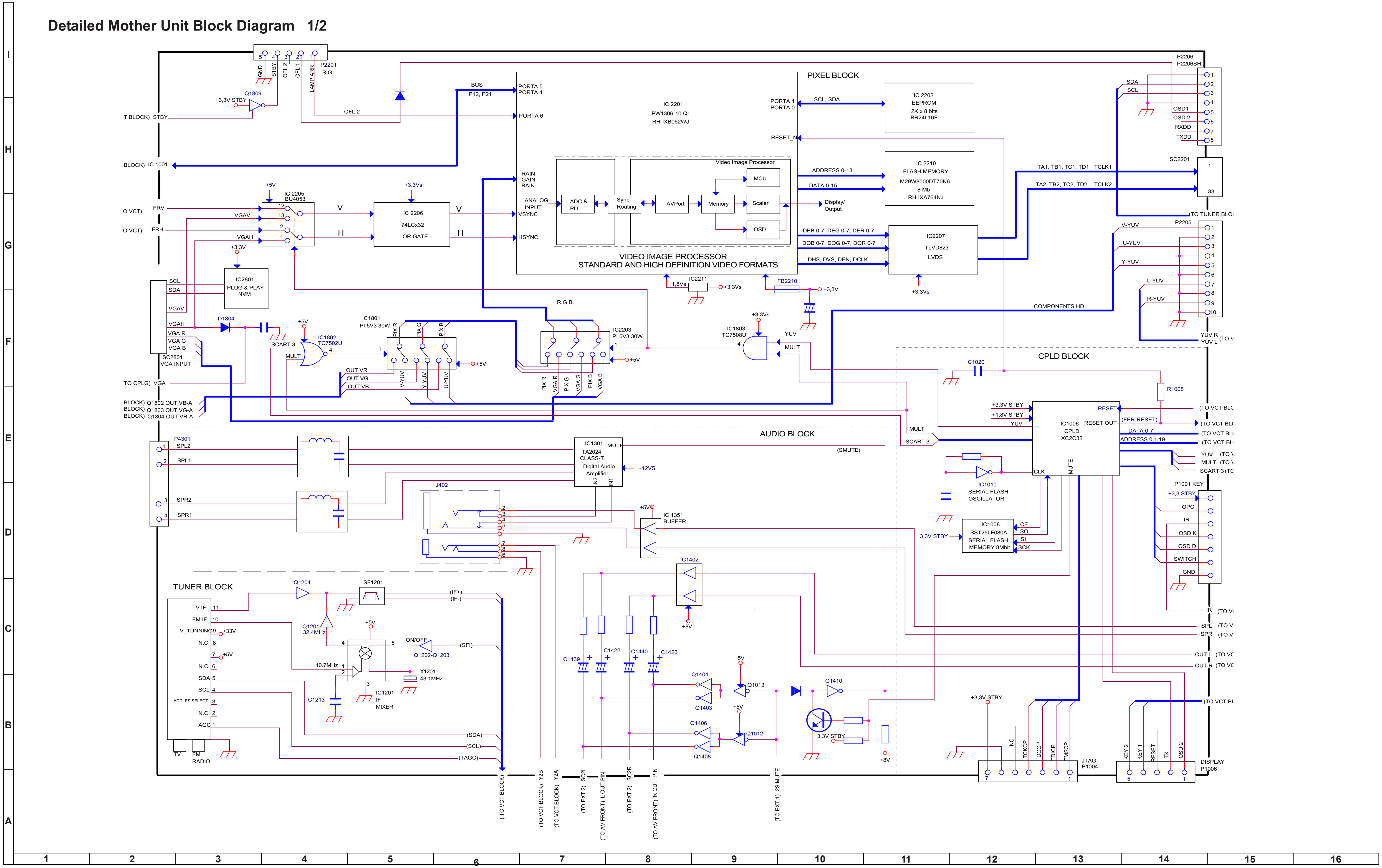
BLOCK DIAGRAMS

Power Block Diagram

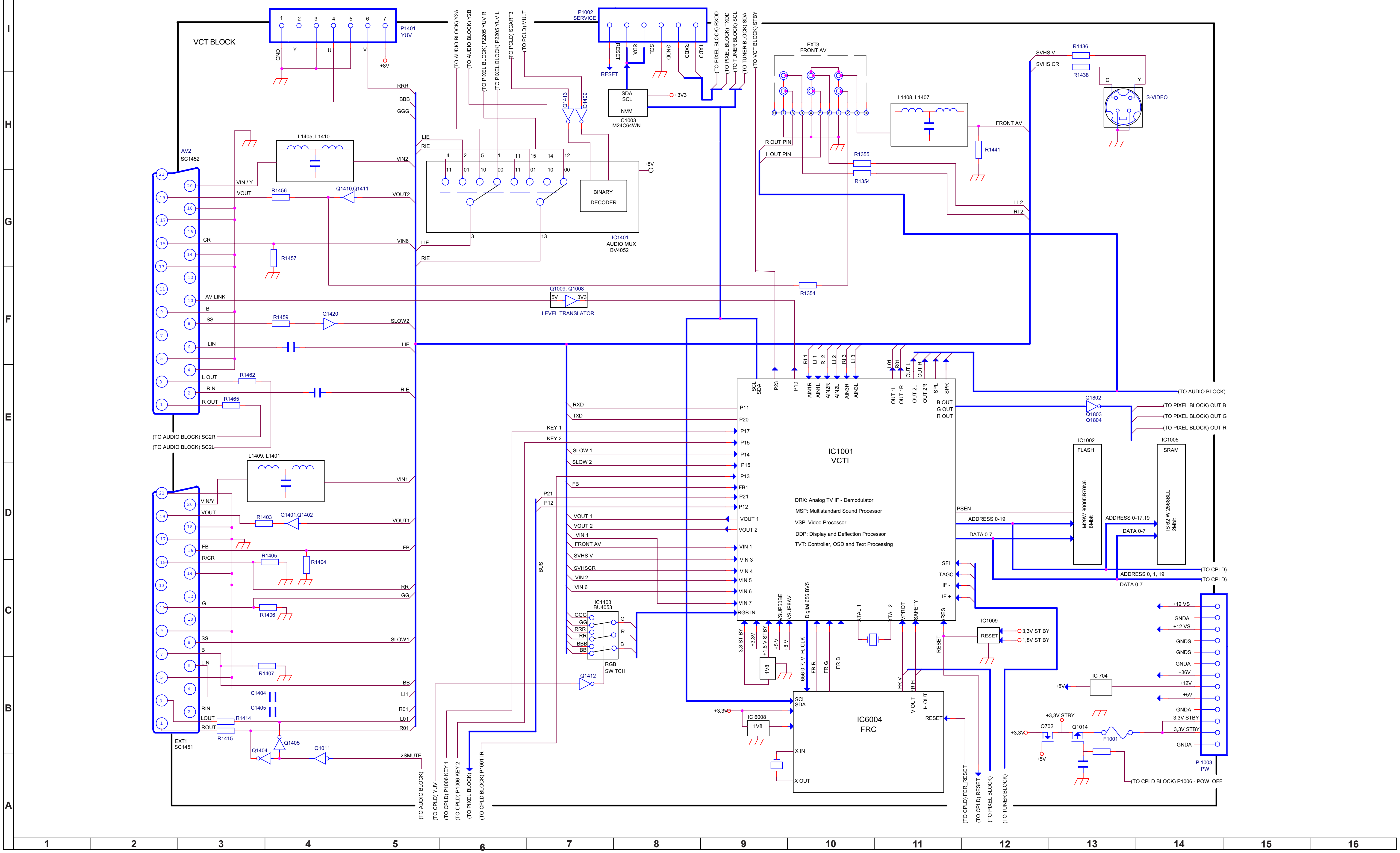

MAIN-UNIT DSETUC656FM03/08/14 DUNTKC656WE03/08/14 (26/32/37)
TUNER RTUNQA016WJZZ TU1201
IC1201 FM-CONT IXB244WJ
SF1201
EXT-1 SC1451
EXT-2 SC1452
EXT-3 A/V-IN J401 S/VIDEO J403
IC1403 RGB-SW BU4053V
IC1402 OP-AMP NJM4560M
Q1011
Q1012/13
IC1001 VIDEO-PROCESSOR IXB058WJ (VCT49XY)
IC6004 Flame Rate -Converter IXB064WJ (FRC9429A)
IC6008 1.8V -REG IXB237WJ
IC1003 E2PROM IXA757WJ
IC2206 A-SW B266WJ
IC1803 AND TC7S08U
IC1002 8Mb-FLASH -MEMORY IXA826WJ
IC1005 1Mb-SRAM IXB060WJ
IC2203 RGB-SW IXB063WJ
IC2205 A-SW BU4053V
IC1801 RGB-SW IXB063WJ
IC2201 SCALER IXB372WJ
IC2207 LVDS TLVD823
IC2202 BR24L16F E2PROM
IC2210 FLASH-MEMORY IXA764
IC1006 CPLD IXB233WJ
IC1008 FLASH-MEMORY IXB234WJ
IC2212 3.3VS -REG IXB238WJ
IC1004 1.8V -REG IXB237WJ
IC2211 1.8VS -REG IXB237WJ
Q702 TXA014WJ
F1001 LA011WJ 2.5A
IC704 +8V-REG NJ78L08U
PC-INPUT RS-232C SC2801 QPLGNA353WJ
IC1401 A-SW BU4528F
IC1351 HEAD-PHONE -AMP BH3543F
AUDIO -PC-IN
HEAD PHONE J402
IC1301 DIGITAL POWER-AMP TA2024
+33V +5V +3.3VSTBY +1.8VSTBY +3.3V +1.8VS 3.3VS +3.3VS +3.3SSTBY +12VS +8V +12V +5V
SC2201 SH P2206 PW(PA-MISS?) P1003 33V 5V 3.3VSTBY +12VS(13VS) +12V
P1401 P2205 SP P1301 KE P1006 RA P1001 P2201
COMPONENT-UNIT DUNTKA920WJ01 (26/32/37)
EXT-4 A/V-IN COMP-V J1901 QTANJA070WJ
YUV-L/R YUV-Y/PR/PB
CONTROL-UNIT DUNTKC864WE03/08/14 (26/32/37)
IN SELECT VOL+ VOL- CH+ CH- POWER SW SW S4057 P0560CE
P4001 3.3VSTBY
IC4001 74HC4094
R/C LED UNIT DUNTKC865WE03(26) WE08(32) WE14(37)
OPC REMOCON POW-LED ON TIMER OPC-LED
SP-BOX RSP-ZA096WJZZ L (26/32/37)
SP-BOX RSP-ZA097WJZZ R (26/32/37)
RRMCGA323WJSA
LCD-CONT-UNIT DUNTKC919FE01/2/3 (26/32/37)
IC4601 GAMMA IXB001WJ
IC4602 E2PROM IXB272WJ
IC4902 FIFO IXA986WJ
IC4901 QS-DRIVER IXB002WJ
IC4903 E2PROM B243WJ(26) B242WJ(32) B228WJ(37)
IC4501 LCD CONTROL IXB003WJ
TFT LCD PANEL RLCDTA034WJ(26) RLCDTA028WJ(32) RLCDTA027WJ(37)
IC4108 +6.7V-REG PQ1CZ41H
IC4109 32V-REG LT1615ES VGH+32V
IC4114 -6V-REG LT1617ES VGL-6V
IC4116 Q4110 15V-REG LTC1872 VLS+15V
IC4107 V-REG LP2951CM VH255
IC4101 GRAY-LEVEL (A706WJ) VH0-255 VL0-255
Q4101/12 A3COMACSCOM A300MAVCOM
IC4102 OP-AMP NJM4580V
IC2010 DAC (M62392FP)
IC4603 SYNC-DET T7WH123U
IC2017 IC2016 IC2019
IC2008 E2PROM (BR24L08F)
IC2004 MONITOR MICRO PROCESSOR (A870WJ)
IC2001 RESET (BD4742G)
IC7709 RESET (BD4742G)
Q2002 Q2004
IC7708 +5V-REG PQ1L503M
IC7706 3.3V-REG PQ033EZ1
IC7704 3.3V-REG PQ033EZ1
IC7711 3.3V-REG PQ1CZ21H
+13V D3.3V_1 D3.3V_2 BU5V +D5V TV-POW VSH3.3V VSH+3.3V COM-BIAS REG(5V)
LV SC4601 SH P2006 PO P7707 P7705 P7704
POWER-UNIT RDENCA101WJZZ(26) RDENCA102WJZZ(32) RDENCA103WJZZ(37)
PO CN704 IS1 INV-ERR INV-OSC OFL1 4V 5V 6V 13V
IC705 INV-CTL OZ9641SN
T704 T705 T706 F705 1A DC450V CN703 3.5VAC CN708 GND OVP
PA CN706 13VS 33V 5V 12V 3.3V
IC708 4V-REG MP1583
Q740 33V-REG 2SD1782
IC709 5V-REG MP1580
IC713 12V-REG XC6202
T701 L703 F704 2.0A D701 IC701 P-FACTOR-CTL MC33262D RL701A PC701
DP CN707 LAMP-ERR OFL1 PS-ON
IC715 3.3V-REG MP1583
Q760 6V-REG 2SJ317
T703 D763 F703 2.0A VA702 IC703 SW-CTL TNY266P F702 3.15A F701 3.15A
PE CN705 3.3V
IC714 3.3V-REG PQ1M335M 3.3VSTB
CN701 AC-CORD AC-IN QACCKA007WJPZ(E/F/I) QACCBA021WJPZ(K) (26/32/37)
LCD BACK-LIGHT
RUNTKA094WJZZ(26) RUNTKA096WJZZ(32) RUNTKA099WJZZ(37) INVERTER-A/B RUNTKA097WJZZ(32) RUNTKA100WJZZ(37)
BACK-LIGHT KLMP-A042WJZZ(26) KLMP-A040WJZZ(32) KLMP-A049WJZZ(37)
RUNTKA095WJZZ(26) RUNTKA098WJZZ(32) RUNTKA101WJZZ(37) INVERTER-GND RUNTKA102WJZZ(37)
T7501 T7502 Q7601
I H G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

BLOCK DIAGRAMS

Detailed Mother Unit Block Diagram 1/2

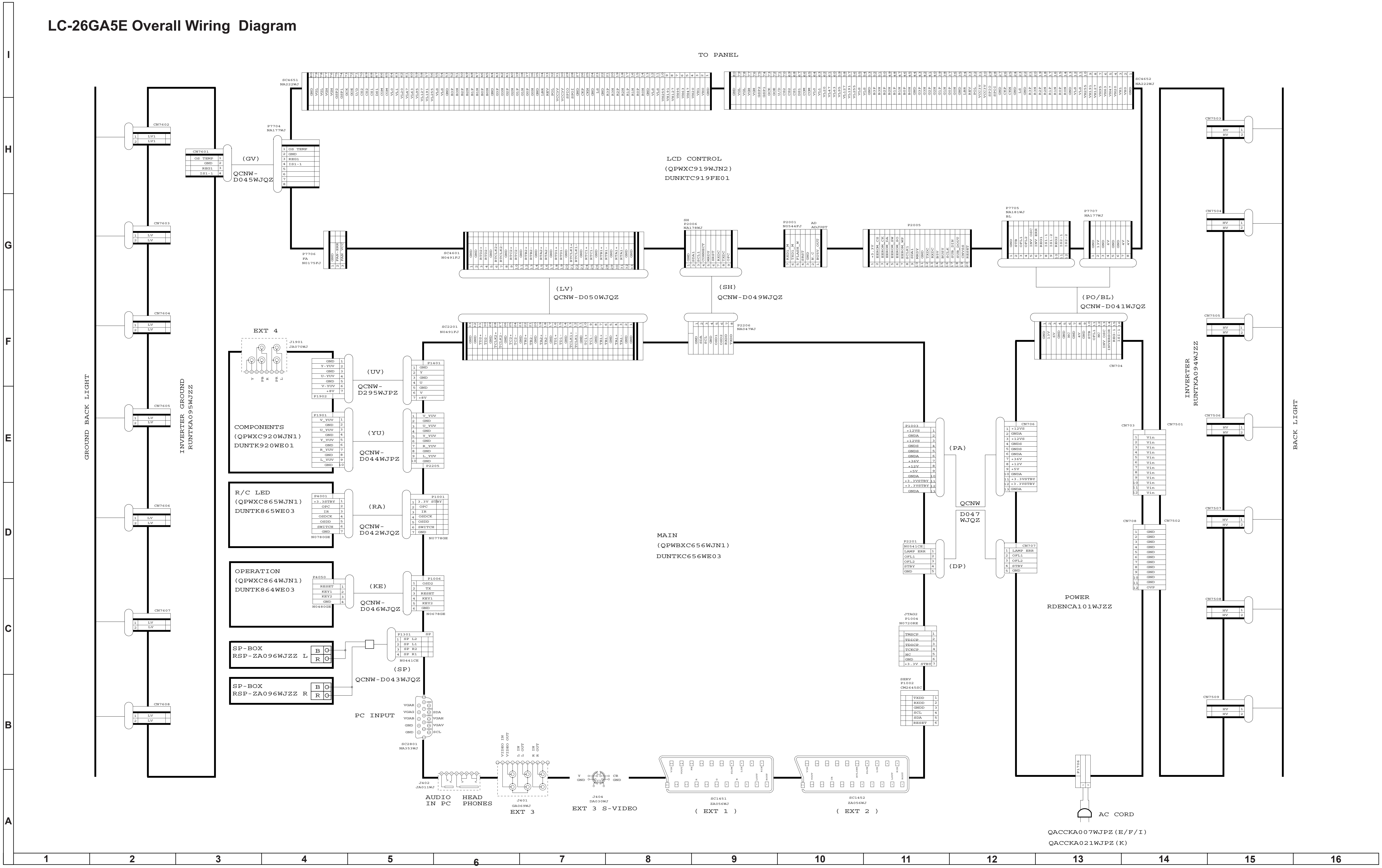

P2201
SIG
GND
STBY
OFL 2
OFL 1
LAMP ARR
Q1809
+3,3V STBY
T BLOCK) STBY
OFL 2
BUS
P12, P21
BLOCK) IC 1001
PIXEL BLOCK
PORTA 5
PORTA 4
PORTA 6
IC 2201
PW1306-10 QL
RH-IXB062WJ
PORTA 1
PORTA 0
SCL, SDA
RESET_N
IC 2202
EEPROM
2K x 8 bits
BR24L16F
RAIN
GAIN
BAIN
ANALOG
INPUT
VSYNC
HSYNC
Video Image Processor
ADC &
PLL
Sync
Routing
AVPort
Memory
MCU
Scaler
OSD
Display/
Output
VIDEO IMAGE PROCESSOR
STANDARD AND HIGH DEFINITION VIDEO FORMATS
ADDRESS 0-13
DATA 0-15
IC 2210
FLASH MEMORY
M29W8000DT70N6
8 Mb
RH-IXA764NJ
DEB 0-7, DEG 0-7, DER 0-7
DOB 0-7, DOG 0-7, DOR 0-7
DHS, DVS, DEN, DCLK
IC2207
TLVD823
LVDS
+3,3Vs
IC2211
+1,8Vs
+3,3Vs
FB2210
+3,3V
P2206
P2206SH
SDA
SCL
OSD1
OSD 2
RXDD
TXDD
SC2201
TA1, TB1, TC1, TD1 TCLK1
TA2, TB2, TC2, TD2 TCLK2
1
33
(TO TUNER BLO
P2205
V-YUV
U-YUV
Y-YUV
L-YUV
R-YUV
COMPONENTS HD
YUV R
YUV L
(TO V
O VCT)
FRV
O VCT)
FRH
VGAV
VGAH
+5V
IC 2205
BU4053
V
H
+3,3Vs
IC 2206
74LCx32
OR GATE
V
H
+3,3V
SCL
SDA
VGAV
IC2801
PLUG & PLAY
NVM
D1804
VGAH
VGA R
VGA G
VGA B
SC2801
VGA INPUT
TO CPLG) VGA
+5V
IC1802
TC7502U
SCART 3
MULT
IC1801
PI 5V3 30W
PIX R
PIX G
PIX B
+5V
OUT VR
OUT VG
OUT VB
V-YUV
Y-YUV
U-YUV
R.G.B.
IC2203
PI 5V3 30W
+5V
PIX R
VGA R
PIX G
VGA G
PIX B
VGA B
+3,3Vs
IC1803
TC7508U
YUV
MULT
BLOCK) Q1802 OUT VB-A
BLOCK) Q1803 OUT VG-A
BLOCK) Q1804 OUT VR-A
CPLD BLOCK
C1020
R1008
+3,3V STBY
+1,8V STBY
YUV
RESET
IC1006
CPLD
XC2C32
RESET OUT
(FER-RESET)
DATA 0-7
ADDRESS 0,1,19
(TO VCT BLC
(TO VCT BLC
(TO VCT BL
(TO VCT BL
YUV (TO V
MULT (TO V
SCART 3 (TC
MULT
SCART 3
CLK
MUTE
IC1010
SERIAL FLASH
OSCILLATOR
3,3V STBY
IC1008
SST25LF080A
SERIAL FLASH
MEMORY 8Mbit
CE
SO
SI
SCK
P1001 KEY
+3,3 STBY
OPC
IR
OSD K
OSD D
SWITCH
GND
AUDIO BLOCK
P4301
SPL2
SPL1
SPR2
SPR1
IC1301
TA2024
CLASS-T
Digital Audio
Amplifier
MUTE
IN2
IN1
+12VS
(SMUTE)
J402
+5V
IC 1351
BUFFER
IC1402
+8V
C1439
C1422
C1440
C1423
Q1404
Q1403
Q1013
+5V
Q1406
Q1408
Q1012
+5V
Q1410
3,3V STBY
+8V
IR (TO V
SPL (TO V
SPR (TO V
OUT L (TO VC
OUT R (TO VC
(TO VCT BL
+3,3V STBY
NC
TCKCP
TDOCP
TDICP
TMSCP
JTAG
P1004
KEY 2
KEY 1
RESET
TX
OSD 2
DISPLAY
P1006
TUNER BLOCK
TV IF
FM IF
V_TUNNING
N.C.
N.C.
SDA
SCL
ADDLES.SELECT
N.C.
AGC
+33V
+5V
TV
FM
RADIO
Q1204
SF1201
(IF+)
(IF-)
Q1201
32.4MHz
+5V
ON/OFF
(SFI)
Q1202-Q1203
10.7MHz
X1201
43.1MHz
C1213
IC1201
IF
MIXER
(SDA)
(SCL)
(TAGC)
(TO VCT BLOCK)
(TO VCT BLOCK) Y2B
(TO VCT BLOCK) Y2A
(TO EXT 2) SC2L
(TO AV FRONT) L OUT PIN
(TO EXT 2) SC2R
(TO AV FRONT) R OUT PIN
(TO EXT 1) 2S MUTE
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

Detailed Mother Unit Block Diagram 2/2


VCT BLOCK
P1401
YUV
GND
Y
U
V
+8V
RRR
BBB
GGG
(TO AUDIO BLOCK) Y2A
(TO AUDIO BLOCK) Y2B
(TO PIXEL BLOCK) P2205 YUV R
(TO PIXEL BLOCK) P2205 YUV L
(TO PCLD) SCART3
(TO PCLD) MULT
P1002
SERVICE
RESET
SDA
SCL
GNDD
RXDD
TXDD
(TO PIXEL BLOCK) RXDD
(TO PIXEL BLOCK) TXDD
(TO TUNER BLOCK) SCL
(TO TUNER BLOCK) SDA
(TO VCT BLOCK) STBY
IC1003
M24C64WN
NVM
+3V3
Q1413
Q1409
EXT3
FRONT AV
L1408, L1407
FRONT AV
R1441
R OUT PIN
L OUT PIN
R1355
R1354
LI 2
RI 2
SVHS V
SVHS CR
R1436
R1438
C
Y
S-VIDEO
AV2
SC1452
L1405, L1410
VIN / Y
VOUT
R1456
Q1410,Q1411
VOUT2
VIN2
LIE
RIE
CR
R1457
VIN6
IC1401
AUDIO MUX
BV4052
BINARY
DECODER
+8V
AV LINK
B
SS
R1459
Q1420
SLOW2
LIN
LIE
L OUT
R1462
RIN
RIE
R OUT
R1465
Q1009, Q1008
5V
3V3
LEVEL TRANSLATOR
R1354
(TO AUDIO BLOCK) SC2R
(TO AUDIO BLOCK) SC2L
L1409, L1401
VIN1
VIN/Y
VOUT
R1403
Q1401,Q1402
VOUT1
FB
R/CR
R1405
R1404
RR
GG
G
R1406
SLOW1
SS
B
LIN
R1407
BB
C1404
LI1
RIN
C1405
R01
LOUT
R1414
L01
ROUT
R1415
EXT1
SC1451
Q1404
Q1405
Q1011
2SMUTE
BUS
RXD
TXD
KEY 1
KEY 2
SLOW 1
SLOW 2
FB
P21
P12
VOUT 1
VOUT 2
VIN 1
FRONT AV
SVHS V
SVHSCR
VIN 2
VIN 6
IC1403
BU4053
GGG
RRR
BBB
RGB
SWITCH
Q1412
IC1001
VCTI
DRX: Analog TV IF - Demodulator
MSP: Multistandard Sound Processor
VSP: Video Processor
DDP: Display and Deflection Processor
TVT: Controller, OSD and Text Processing
SCL
SDA
P23
P10
AIN1R
AIN1L
AIN2R
AIN2L
AIN3R
AIN3L
OUT 1L
OUT 1R
OUT 2L
OUT 2R
SPL
SPR
B OUT
G OUT
R OUT
P11
P20
P17
P15
P14
P13
FB1
P21
P12
VIN 3
VIN 4
VIN 5
VIN 7
RGB IN
PSEN
ADDRESS 0-19
DATA 0-7
SFI
TAGC
IF -
IF +
3,3 ST BY
+3,3V
+1,8 V STBY
+5 V
+8 V
VSUP50BE
VSUP8AV
Digital 656 BV5
656 0-7, V, H, CLK
FR R
FR G
FR B
XTAL 1
XTAL 2
VPROT
SAFETY
RES
RESET
1V8
(TO AUDIO BLOCK)
Q1802
Q1803
Q1804
(TO PIXEL BLOCK) OUT B
(TO PIXEL BLOCK) OUT G
(TO PIXEL BLOCK) OUT R
IC1002
FLASH
M29W 800DB70N6
8Mbit
IC1005
SRAM
IS 62 W 256BBLL
2Mbit
ADDRESS 0-17,19
DATA 0-7
(TO CPLD)
ADDRESS 0, 1, 19
(TO CPLD)
DATA 0-7
IC1009
3,3V ST BY
1,8V ST BY
IC6004
FRC
SCL
SDA
+3,3V
IC 6008
1V8
X IN
X OUT
V OUT
H OUT
FR V
FR H
RESET
(TO AUDIO BLOCK)
(TO CPLD) YUV
(TO CPLD) P1006 KEY 1
(TO CPLD) P1006 KEY 2
(TO PIXEL BLOCK)
(TO CPLD BLOCK) P1001 IR
(TO CPLD) FER_RESET
(TO CPLD) RESET
(TO PIXEL BLOCK)
(TO TUNER BLOCK)
+12 VS
GNDA
+12 VS
GNDS
GNDS
GNDA
+36V
+12V
+5V
GNDA
3,3V STBY
3,3V STBY
GNDA
IC 704
+8V
+3,3V STBY
Q702
Q1014
+3,3V
+5V
F1001
P 1003
PW
(TO CPLD BLOCK) P1006 - POW_OFF
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I

OVERALL WIRING DIAGRAMS

LC-26GA5E Overall Wiring Diagram


TO PANEL
SC4651 NA222WJ
SC4652 NA222WJ
LCD CONTROL
(QPWXC919WJN2)
DUNKTC919FE01
(GV)
QCNW-D045WJQZ
CN7601
P7704 NA177WJ
P7706 FA N0175PJ
SC4601 N0491PJ
SH P2006 NA178WJ
P2001 N0544PJ
AD ADJUST
P2005
P7705 NA181WJ BL
P7707 NA177WJ
(LV)
QCNW-D050WJQZ
(SH)
QCNW-D049WJQZ
(PO/BL)
QCNW-D041WJQZ
SC2201 N0491PJ
P2206 NA047WJ
CN704
EXT 4
J1901 JA070WJ
COMPONENTS
(QPWXC920WJN1)
DUNTK920WE01
(UV)
QCNW-D295WJPZ
P1902
P1401
(YU)
QCNW-D044WJPZ
P1901
P2205
R/C LED
(QPWXC865WJN1)
DUNTK865WE03
(RA)
QCNW-D042WJQZ
P4001
P1001
N0780GE
N0778GE
OPERATION
(QPWXC864WJN1)
DUNTK864WE03
(KE)
QCNW-D046WJQZ
P4050
P1006
N0480GE
N0678GE
SP-BOX
RSP-ZA096WJZZ L
SP-BOX
RSP-ZA096WJZZ R
P1301
(SP)
QCNW-D043WJQZ
PC INPUT
SC2801 NA353WJ
MAIN
(QPWBXC656WJN1)
DUNTKC656WE03
P1003
(PA)
QCNW
D047
WJQZ
(DP)
P2201 N0541CE
CN706
CN707
JTAG2 P1004 N0720RE
SERV P1002 CM2645SC
POWER
RDENCA101WJZZ
CN703
CN708
CN7501
CN7502
INVERTER
RUNTKA094WJZZ
INVERTER GROUND
RUNTKA095WJZZ
GROUND BACK LIGHT
BACK LIGHT
CN7602
CN7603
CN7604
CN7605
CN7606
CN7607
CN7608
CN7503
CN7504
CN7505
CN7506
CN7507
CN7508
CN7509
J402 JA011WJ
AUDIO IN PC
HEAD PHONES
J401 GA069WJ
EXT 3
J404 DA030WJ
EXT 3 S-VIDEO
SC1451 ZA056WJ
(EXT 1)
SC1452 ZA056WJ
(EXT 2)
P1706
AC CORD
QACCKA007WJPZ(E/F/I)
QACCKA021WJPZ(K)
I
H
G
F
E
D
C
B
A
1
2
3
4
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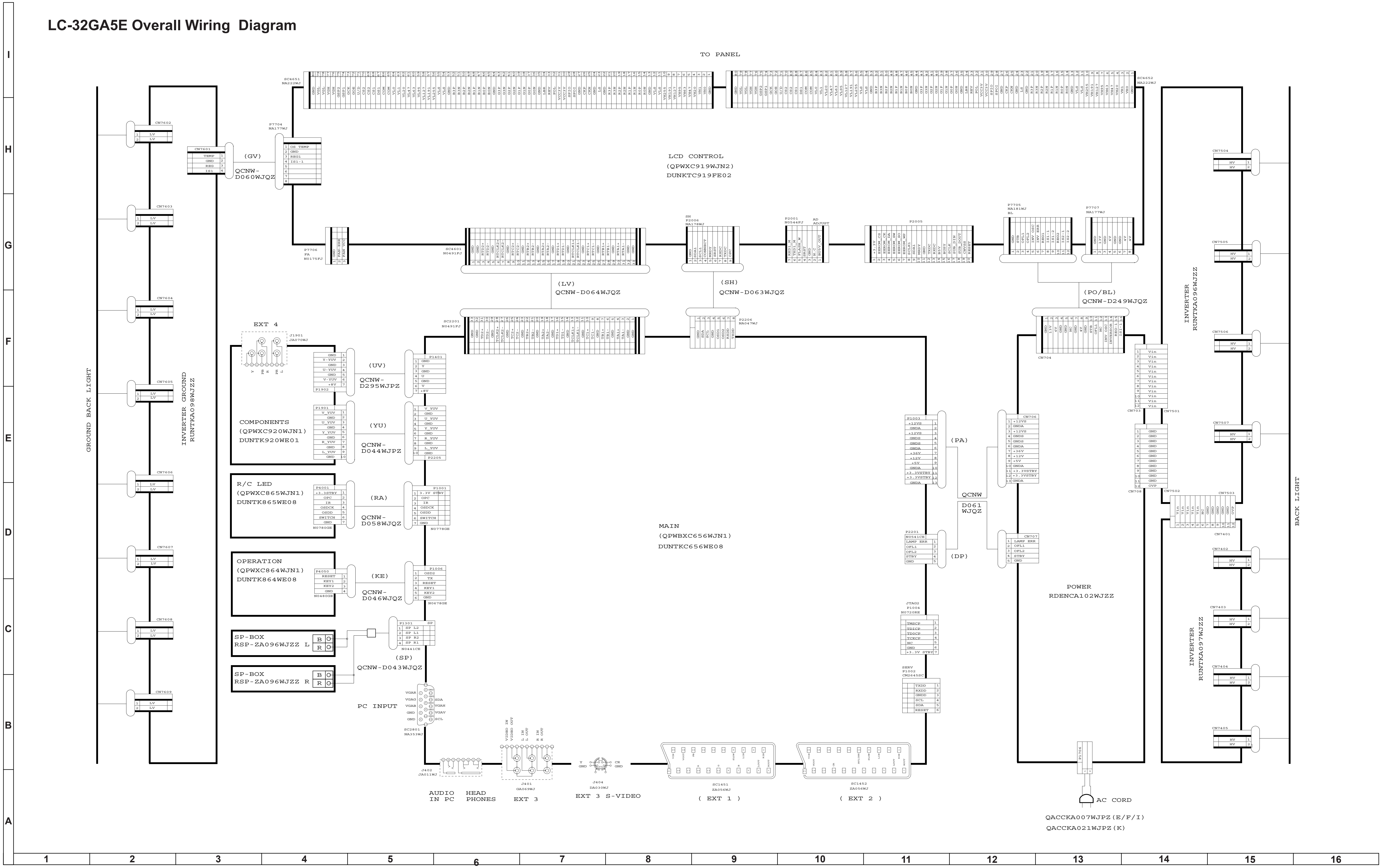
15
16

OVERALL WIRING DIAGRAMS

LC-32GA5E Overall Wiring Diagram


TO PANEL
SC4651 NA222WJ
SC4652 NA222WJ
LCD CONTROL
(QPWXC919WJN2)
DUNKTC919FE02
P7704 NA177WJ
CN7601
(GV)
QCNW-D060WJQZ
P7706 FA N0175PJ
SC4601 N0491PJ
(LV)
QCNW-D064WJQZ
SH P2006 NA178WJ
(SH)
QCNW-D063WJQZ
P2001 N0544PJ
AD ADJUST
P2005
P7705 NA181WJ BL
P7707 NA177WJ
(PO/BL)
QCNW-D249WJQZ
SC2201 N0491PJ
P2206 NA047WJ
CN704
GROUND BACK LIGHT
INVERTER GROUND
RUNTKA098WJZZ
CN7602
CN7603
CN7604
CN7605
CN7606
CN7607
CN7608
CN7609
LV
EXT 4
J1901 JA070WJ
Y PB R PR L
COMPONENTS
(QPWXC920WJN1)
DUNTK920WE01
P1902
P1901
(UV)
QCNW-D295WJPZ
P1401
(YU)
QCNW-D044WJPZ
P2205
R/C LED
(QPWXC865WJN1)
DUNTK865WE08
P4001
N0780GE
(RA)
QCNW-D058WJQZ
P1001
N0778GE
OPERATION
(QPWXC864WJN1)
DUNTK864WE08
P4050
N0480GE
(KE)
QCNW-D046WJQZ
P1006
N0678GE
SP-BOX
RSP-ZA096WJZZ L
SP-BOX
RSP-ZA096WJZZ R
B
R
P1301
SP
N0441CE
(SP)
QCNW-D043WJQZ
PC INPUT
SC2801 NA353WJ
MAIN
(QPWBXC656WJN1)
DUNTKC656WE08
P1003
(PA)
QCNW
D061
WJQZ
(DP)
P2201 N0541CE
CN706
CN707
JTAG2 P1004 N0720RE
SERV P1002 CM2645SC
POWER
RDENCA102WJZZ
CN703
CN7501
CN708
CN7502
CN7503
CN7401
INVERTER
RUNTKA096WJZZ
INVERTER
RUNTKA097WJZZ
CN7504
CN7505
CN7506
CN7507
CN7402
CN7403
CN7404
CN7405
HV
BACK LIGHT
J402 JA011WJ
AUDIO IN PC
HEAD PHONES
VIDEO IN
VIDEO OUT
L IN
L OUT
R IN
R OUT
J401 GA069WJ
EXT 3
J404 DA030WJ
EXT 3 S-VIDEO
SC1451 ZA056WJ
(EXT 1)
SC1452 ZA056WJ
(EXT 2)
P1705
AC CORD
QACCKA007WJPZ(E/F/I)
QACCKA021WJPZ(K)
I
H
G
F
E
D
C
B
A
1
2
3
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5
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SCHEMATIC DIAGRAMS

Description:

VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on exclusive AC adaptor and the stable supply voltage of AC 230V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance “Ω” is omitted. (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted. (J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/16W, unless otherwise noted.
4. All resistors are Carbon type, unless otherwise noted.

Ⓒ: Solid
Ⓦ: Cement
Ⓢ: Oxide Film
Ⓣ: Special
Ⓝ: Metal Coating

CAPACITOR

1. All capacitors are µF, unless otherwise noted. (P=pF=µµF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.

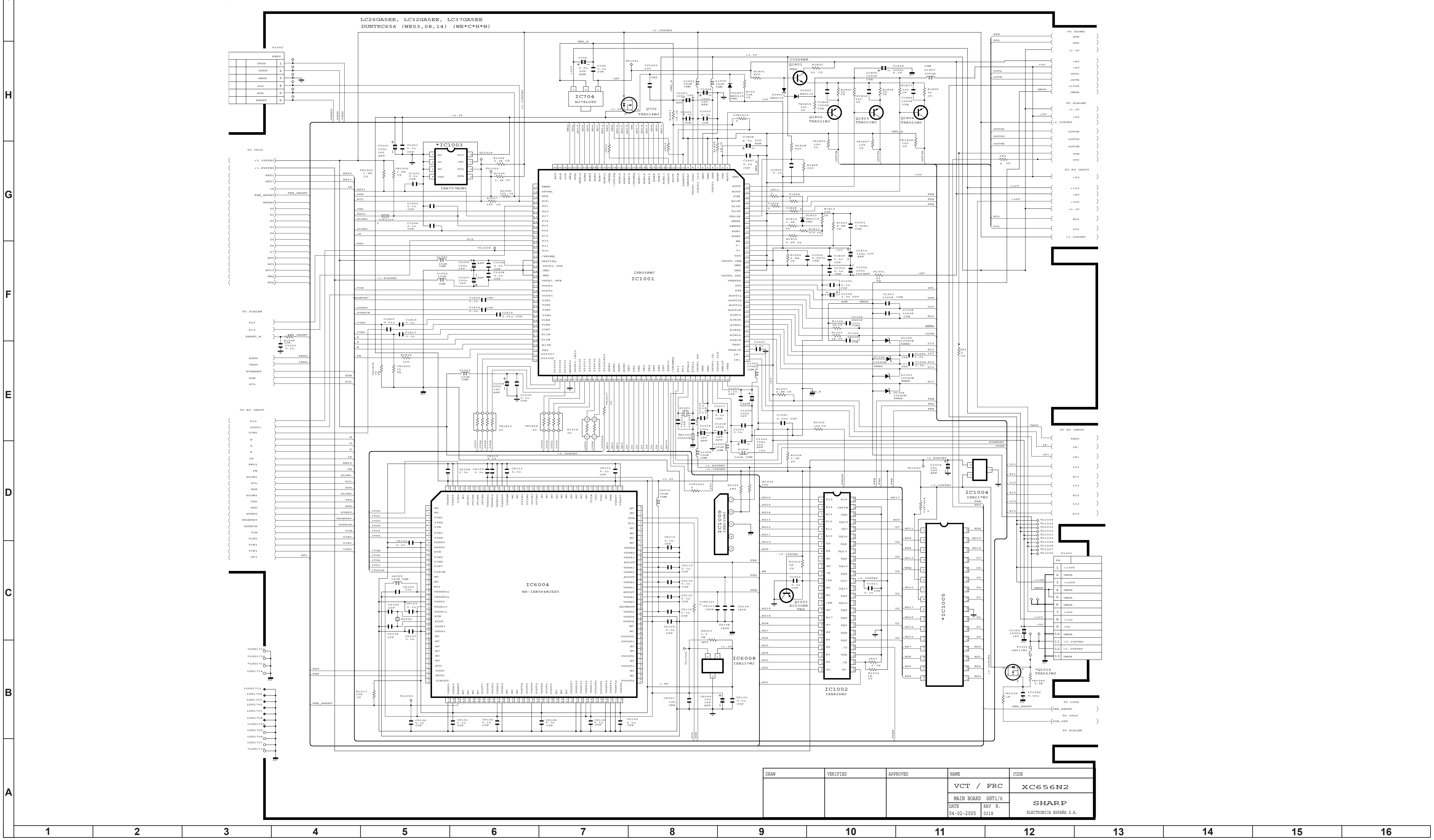
(ML): Mylar
(TA): Tantalum
(PF): Polypro Film
(ST): Styrol

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

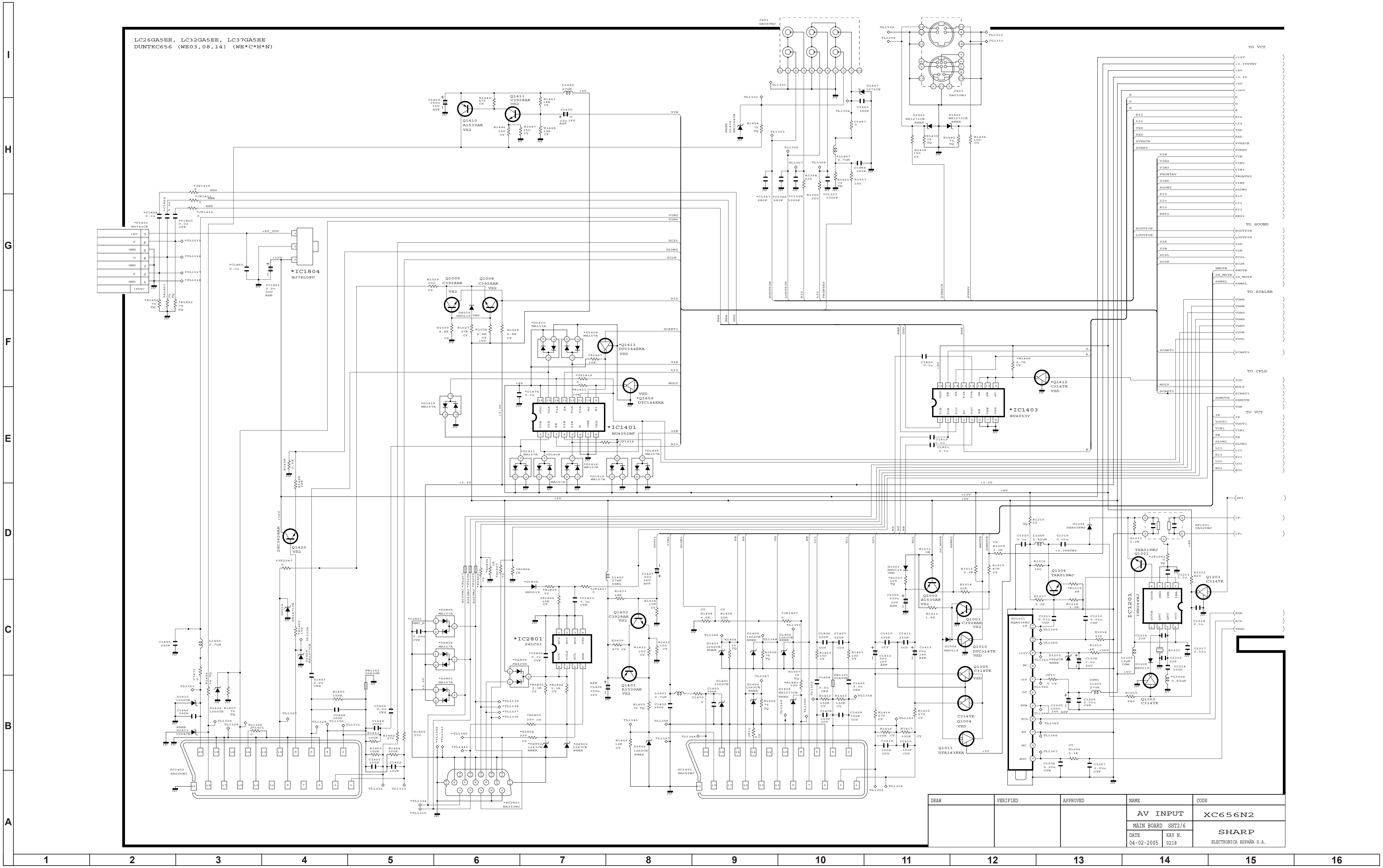
IMPORTANT SAFETY NOTICE:
PARTS MARKED WITH “⚠” (▨) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

SCHEMATIC DIAGRAMS

Main Unit Diagram 1/6 (VCT / FRC)

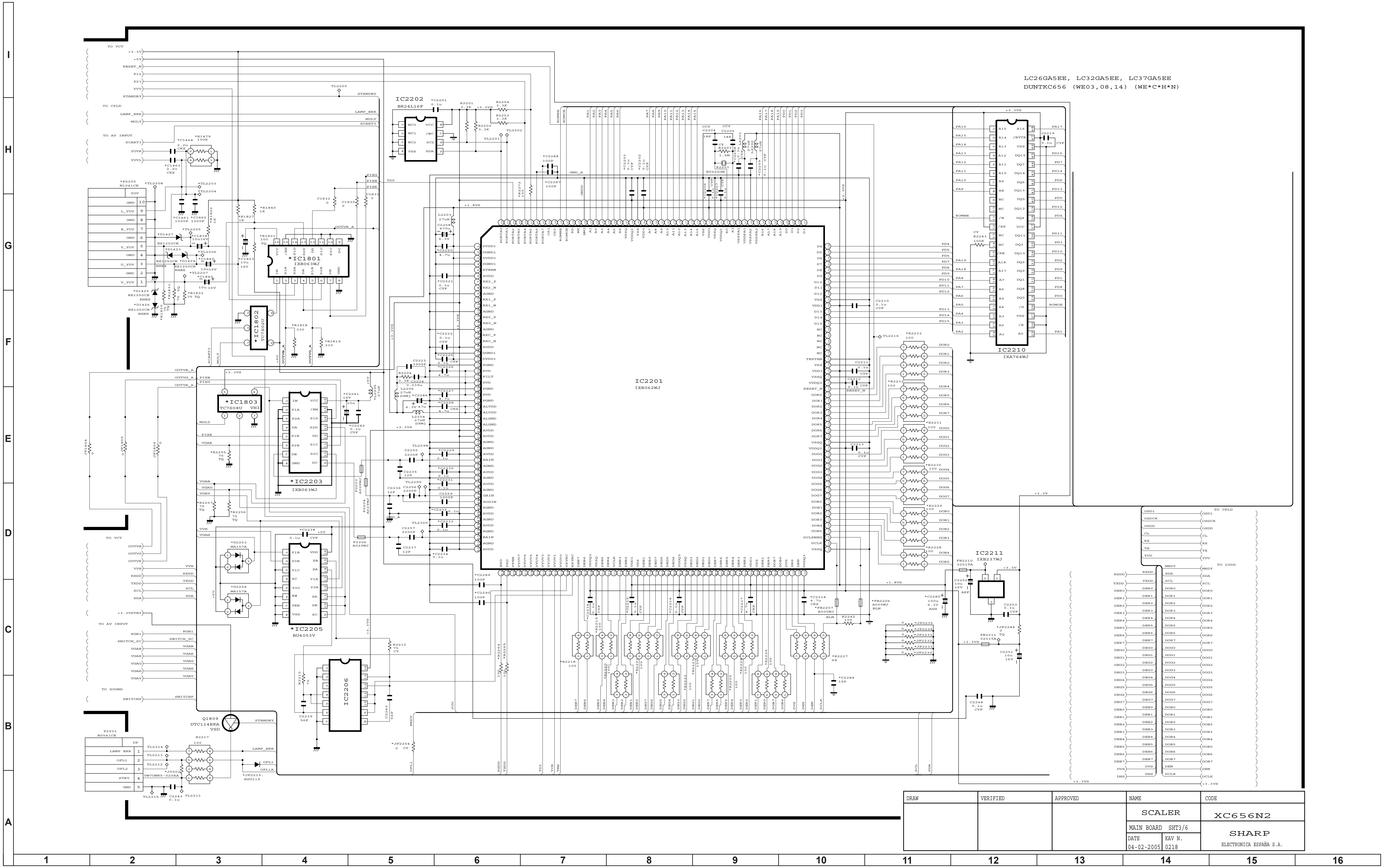

LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC656 (WE03,08,14) (WE*C*H*N)
IC704
NJ78L08U
Q702
TXA014WJ
*IC1003
IXA757WJN1
IXB058WJ
IC1001
IC6004
RH-IXB064WJZZY
IC1009
IC6008
IXB237WJ
IC1002
IXA826WJ
IC1004
IXB237WJ
*IC1005
Q1001
Q1801
Q1802
Q1803
Q1804
*Q1014
TO CPLD
TO SCALER
TO AV INPUT
TO SOUND
TO LVDS
P1002
P1001
DRAW
VERIFIED
APPROVED
NAME
CODE
VCT / FRC
XC656N2
MAIN BOARD SHT1/6
DATE
04-02-2005
KAV N.
0218
SHARP
ELECTRONICA ESPAÑA S.A.
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

Main Unit Diagram 2/6 (AV INPUT)


I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC656 (WE03,08,14) (WE*C*H*N)
*IC1804
NJ78L08U
*IC1401
BU4052BF
*IC1403
BU4053V
*IC2801
24LC21
IC1201
IXB244WJ
TU1201
*P1401
J401
J403
SC1451
SC1452
SC2801
SF1201
CA025WJ
Q1408
Q1409
Q1410
A1530AR
Q1411
C3928AR
Q1412
C314TK
Q1413
DTC144EKA
Q1420
Q1401
Q1402
Q1001
Q1002
Q1003
Q1004
Q1005
Q1008
Q1009
Q1010
Q1011
DTA143EKA
Q1201
Q1202
Q1203
Q1204
TO VCT
+12V
+3.3VSTBY
+8V
+3.3V
+5V
+36V
R
G
B
RI2
LI2
TXD
RXD
SVHSCR
SVHSV
VIN
VIN2
VIN3
FRONTAV
VIN6
SLOW2
P10
LI3
RI3
KEY2
TO SOUND
ROUTPIN
LOUTPIN
Y2A
Y2B
SC2L
SC2R
SMUTE
2S_MUTE
SSMSL
TO SCALER
VGAR
VGAB
VGAG
VGAH
VGAV
YUVR
YUVL
SCART3
TO CPLD
YUV
MULT
SCART3
SSMUTE
VGA
TO VCT
IR
VOUT1
VIN1
FB
SLOW1
LI1
RI1
LO1
RO1
SFI
IF-
IF+
SDA
SCL
TAGC
(YUV)

DRAW	VERIFIED	APPROVED	NAME	CODE
			AV INPUT	XC656N2
			MAIN BOARD SHT2/6	SHARP ELECTRONICA ESPAÑA S.A.
			DATE 04-02-2005 / KAV N. 0218	

Main Unit Diagram 3/6 (SCALER)


LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC656 (WE03,08,14) (WE*C*H*N)
IC2201
IXB062WJ
IC2202
BR24L16F
*IC1801
IXB063WJ
*IC1802
TC7S02U
*IC1803
TC7S08U
*IC2203
IXB063WJ
*IC2205
BU4053V
IC2206
IC2210
IXA764WJ
IC2211
IXB237WJ
Q1809
DTC114EKA
P2201
P2205
TO VCT
TO CPLD
TO AV INPUT
TO SOUND
TO LVDS
+3.3V
+5V
RESET_N
STANDBY
LAMP_ERR
MULT
SCART3
OPL1
OPL2
STBY
GND
DRAW
VERIFIED
APPROVED
NAME
SCALER
CODE
XC656N2
MAIN BOARD SHT3/6
DATE
04-02-2005
KAV N.
0218
SHARP
ELECTRONICA ESPAÑA S.A.
1
2
3
4
5
6
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8
9
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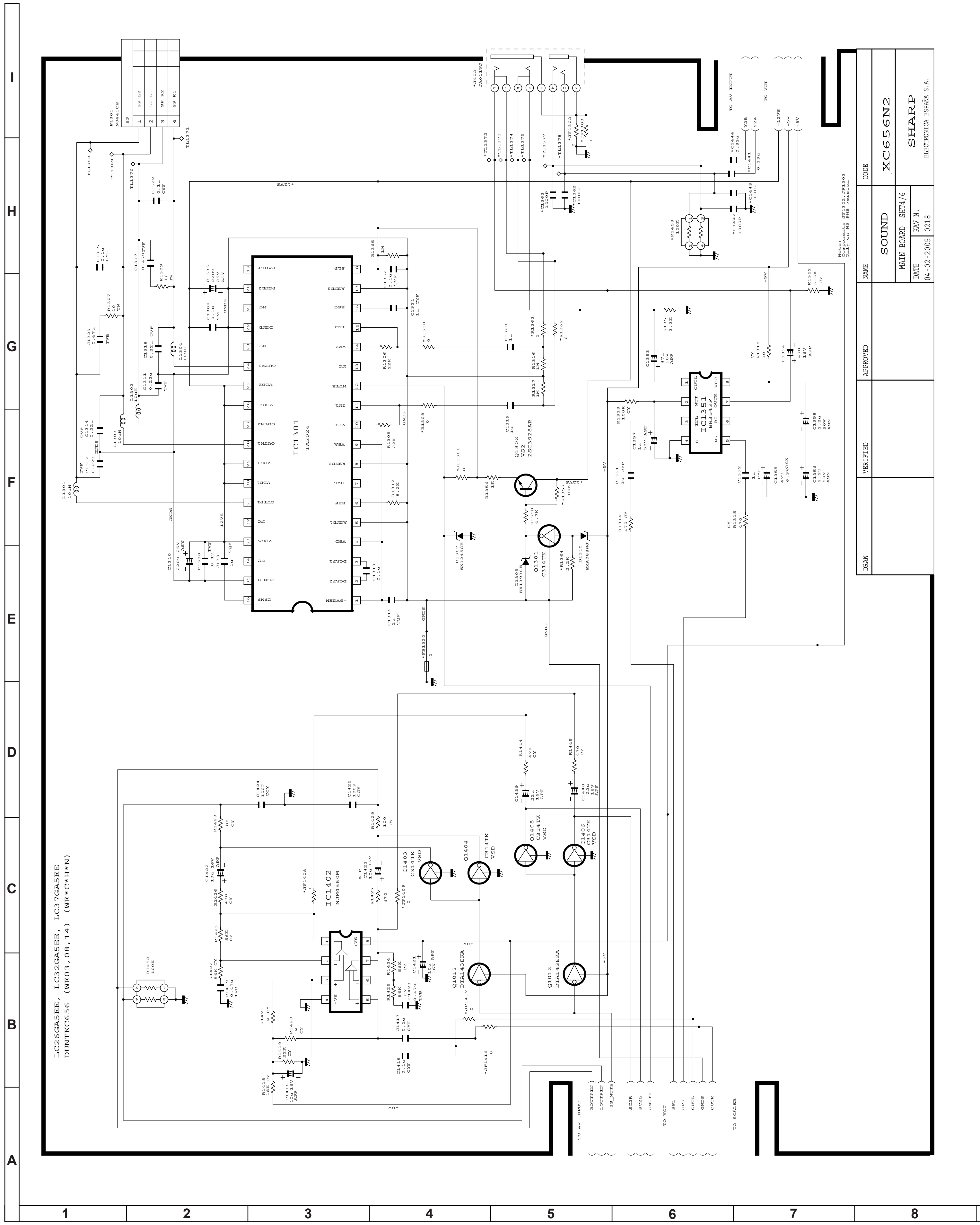
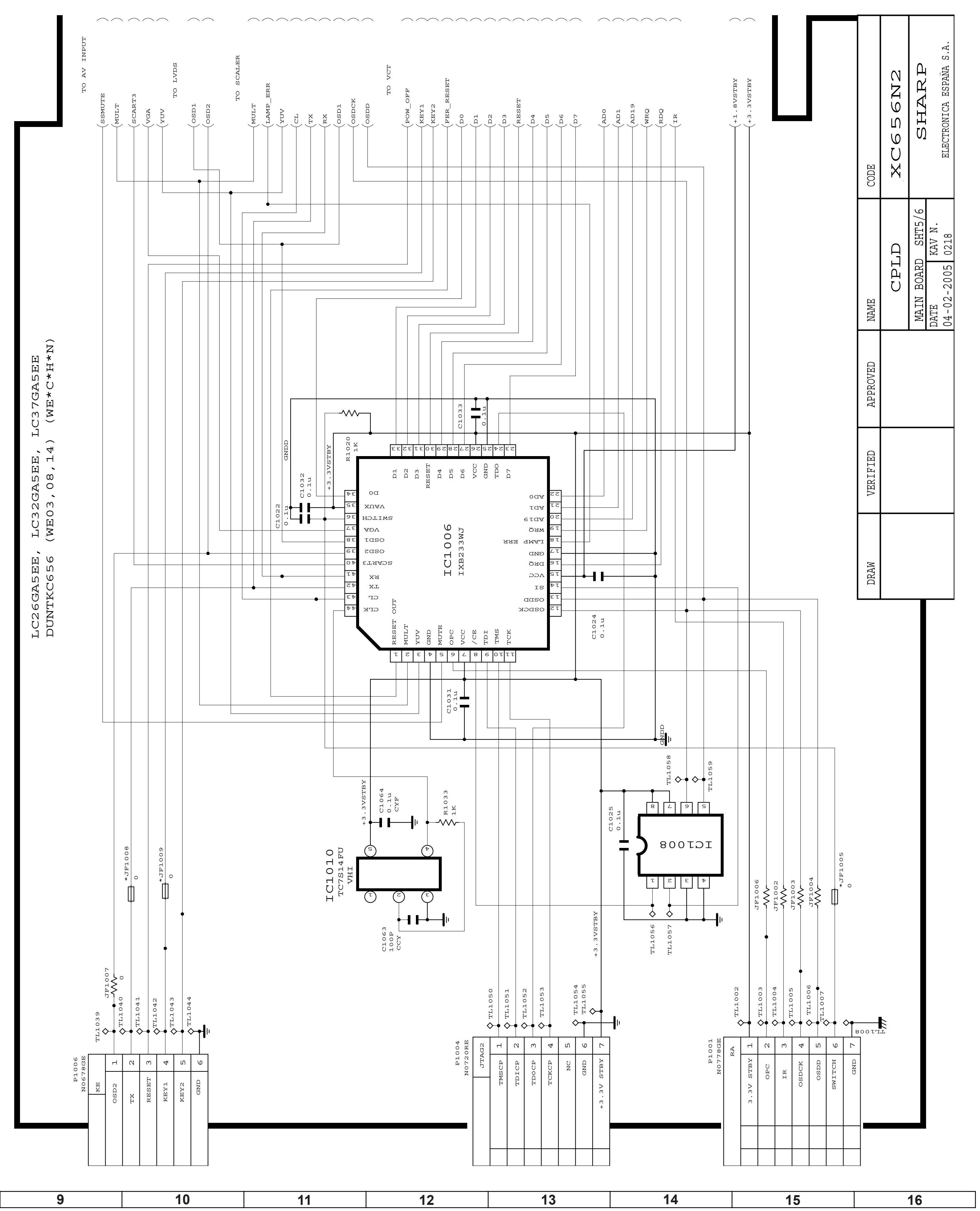
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I

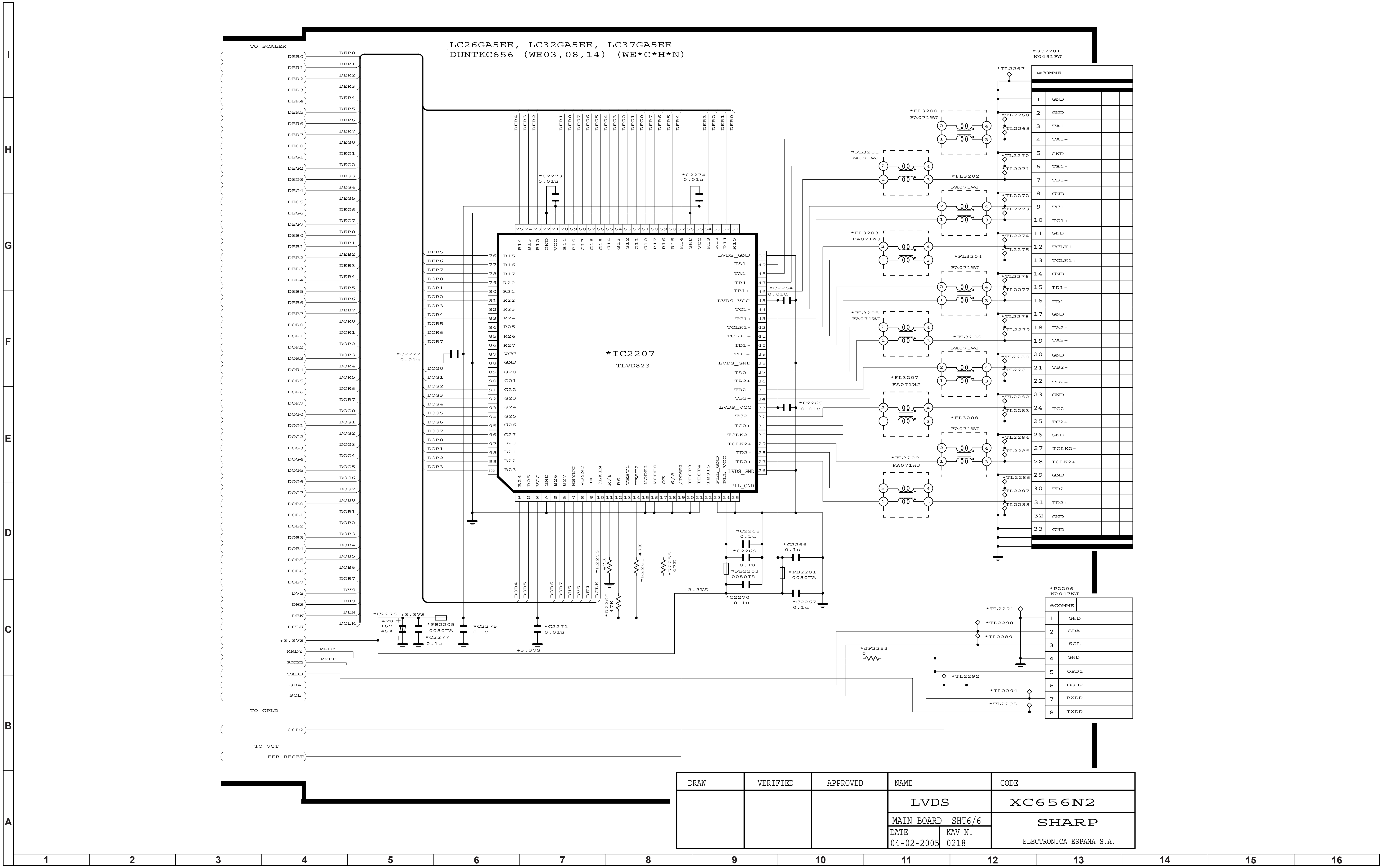
Main Unit Diagram 4/6 (SOUND)


IC1301
TA1324
IC1351
BH3543F
IC1402
NJM4560M
Q1301
Q1302
Q1012
Q1013
Q1403
Q1404
Q1405
Q1406
P1301
TO AV INPUT
TO VCT
TO SCALER
LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC656 (WE03,08,14) (WE*C*H*N)
CODE
XC656N2
SHARP
ELECTRONICA ESPAÑA S.A.
NAME
SOUND
MAIN BOARD SHT4/6
DATE
04-02-2005
KAV N.
0218
APPROVED
VERIFIED
DRAW
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8

Main Unit Diagram 5/6 (CPLD)


IC1006
IXB233WJ
IC1010
TC7S14FU
IC1008
P1006
P1004
P1001
TO AV INPUT
TO LVDS
TO SCALER
TO VCT
LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC656 (WE03,08,14) (WE*C*H*N)
CODE
XC656N2
SHARP
ELECTRONICA ESPAÑA S.A.
NAME
CPLD
MAIN BOARD SHT5/6
DATE
04-02-2005
KAV N.
0218
APPROVED
VERIFIED
DRAW
9
10
11
12
13
14
15
16

Main Unit Diagram 6/6 (LVDS)


LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC656 (WE03,08,14) (WE*C*H*N)
TO SCALER
TO CPLD
TO VCT
*IC2207
TLVD823
*SC2201
N0491FJ
*P2206
NA047WJ
@COMME
*FL3200 FA071WJ
*FL3201 FA071WJ
*FL3202 FA071WJ
*FL3203 FA071WJ
*FL3204 FA071WJ
*FL3205 FA071WJ
*FL3206 FA071WJ
*FL3207 FA071WJ
*FL3208 FA071WJ
*FL3209 FA071WJ
*C2264 0.01u
*C2265 0.01u
*C2272 0.01u
*C2273 0.01u
*C2274 0.01u
*C2266 0.1u
*C2267 0.1u
*C2268 0.1u
*C2269 0.1u
*C2270 0.1u
*C2271 0.01u
*C2275 0.1u
*C2276 47u 16V ASX
*C2277 0.1u
*FB2201 0080TA
*FB2203 0080TA
*FB2205 0080TA
*R2258 47K
*R2259 47K
*R2260 47K
*R2261 47K
*JF2253 0
+3.3VS
FER_RESET
OSD2
DRAW
VERIFIED
APPROVED
NAME
CODE
LVDS
XC656N2
MAIN BOARD SHT6/6
DATE
04-02-2005
KAV N.
0218
SHARP
ELECTRONICA ESPAÑA S.A.
I
H
G
F
E
D
C
B
A
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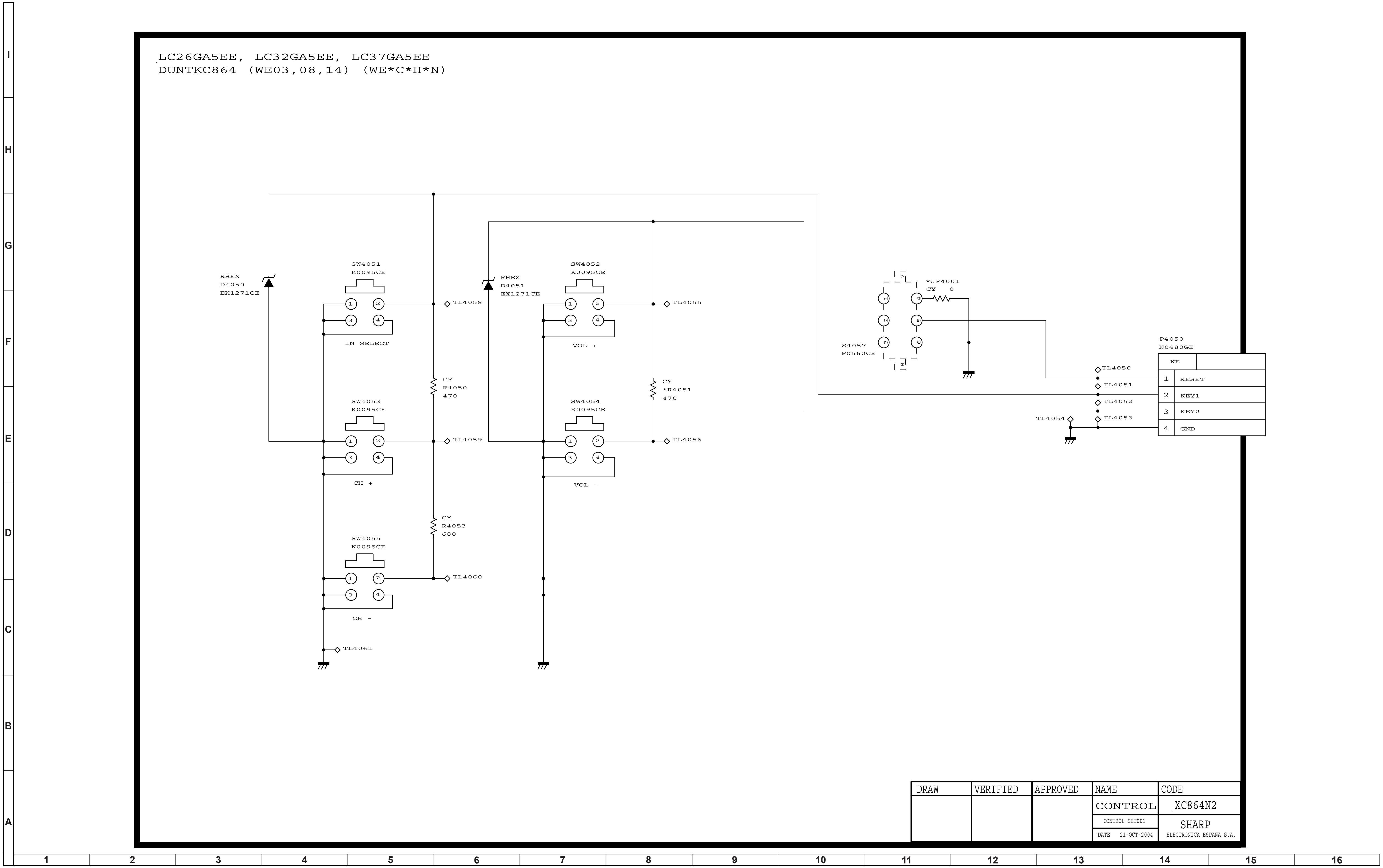
16

Operation Unit Diagram (CONTROL)

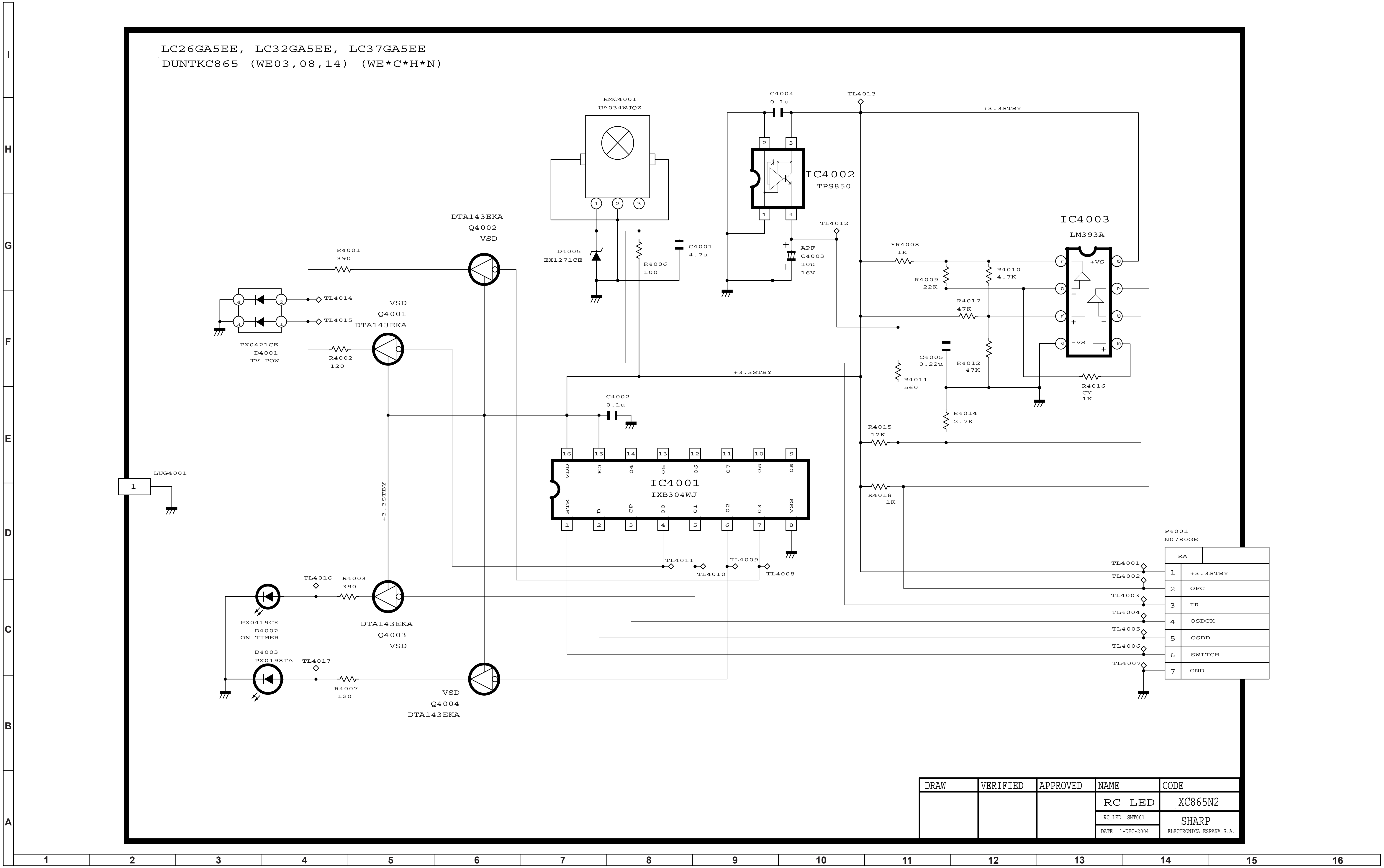


LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC864 (WE03,08,14) (WE*C*H*N)

RHEX
D4050
EX1271CE
SW4051
K0095CE
1
2
3
4
IN SELECT
TL4058
CY
R4050
470
SW4053
K0095CE
CH +
TL4059
CY
R4053
680
SW4055
K0095CE
CH -
TL4060
TL4061
RHEX
D4051
EX1271CE
SW4052
K0095CE
VOL +
TL4055
CY
*R4051
470
SW4054
K0095CE
VOL -
TL4056
S4057
P0560CE
7
8
5
6
*JF4001
CY 0
P4050
N0480GE
KE
RESET
KEY1
KEY2
GND
TL4050
TL4051
TL4052
TL4053
TL4054
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

DRAW	VERIFIED	APPROVED	NAME	CODE
			CONTROL	XC864N2
			CONTROL SHT001	SHARP
			DATE 21-OCT-2004	ELECTRONICA ESPANA S.A.

RC / Led Unit Diagram (RC_LED)


LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC865 (WE03,08,14) (WE*C*H*N)
RMC4001
UA034WJQZ
C4004
0.1u
TL4013
+3.3STBY
IC4002
TPS850
TL4012
APF
C4003
10u
16V
IC4003
LM393A
*R4008
1K
R4009
22K
R4010
4.7K
R4017
47K
R4012
47K
C4005
0.22u
R4011
560
R4014
2.7K
R4015
12K
R4016
CY
1K
R4018
1K
+VS
-VS
DTA143EKA
Q4002
VSD
D4005
EX1271CE
R4006
100
C4001
4.7u
R4001
390
TL4014
TL4015
VSD
Q4001
DTA143EKA
PX0421CE
D4001
TV POW
R4002
120
C4002
0.1u
+3.3STBY
IC4001
IXB304WJ
VDD
E0
04
05
06
07
08
08
STR
D
CP
00
01
02
03
VSS
LUG4001
TL4011
TL4010
TL4009
TL4008
TL4016
R4003
390
PX0419CE
D4002
ON TIMER
DTA143EKA
Q4003
VSD
D4003
PX0198TA
TL4017
R4007
120
VSD
Q4004
DTA143EKA
P4001
N0780GE
RA
TL4001
TL4002
TL4003
TL4004
TL4005
TL4006
TL4007
1 +3.3STBY
2 OPC
3 IR
4 OSDCK
5 OSDD
6 SWITCH
7 GND
DRAW
VERIFIED
APPROVED
NAME
CODE
RC_LED
XC865N2
RC_LED SHT001
SHARP
DATE 1-DEC-2004
ELECTRONICA ESPANA S.A.
I
H
G
F
E
D
C
B
A
1
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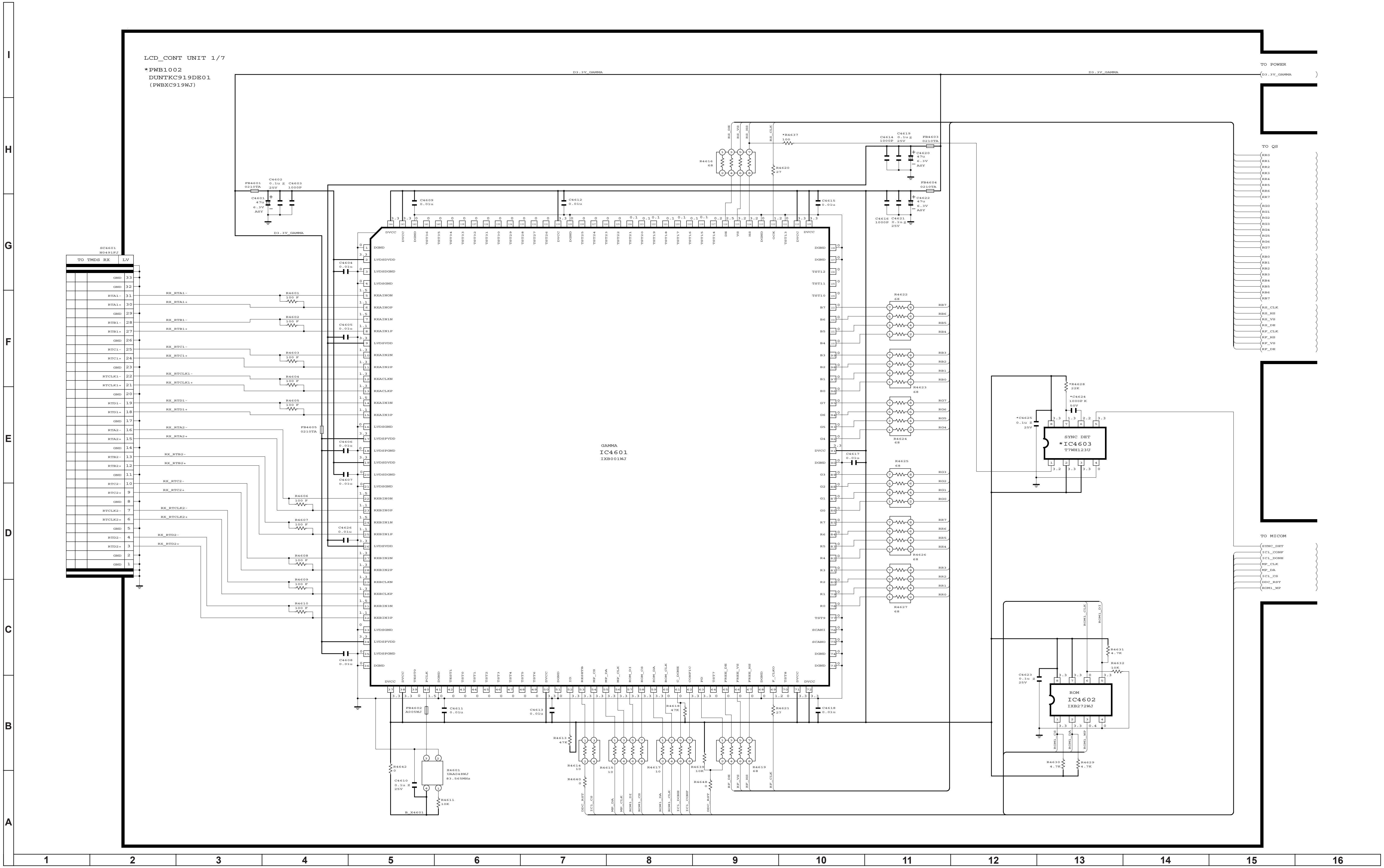
LC-26GA5E LCD Control Unit Diagram 1/7 (GAMMA)


LCD_CONT UNIT 1/7
*PWB1002
DUNTKC919DE01
(PWBXC919WJ)
D3.3V_GAMMA
SC4601
TO TMDS RX
LV
GAMMA
IC4601
IXB001WJ
SYNC DET
*IC4603
T7WH123U
ROM
IC4602
IXB272WJ
X4601
B_X4601
TO POWER
TO QS
TO MICOM
SYNC_DET
IC1_CONF
IC1_DONE
MP_CLK
MP_DA
IC1_CS
DDC_RST
ROM1_WP
I
H
G
F
E
D
C
B
A
1
2
3
4
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11
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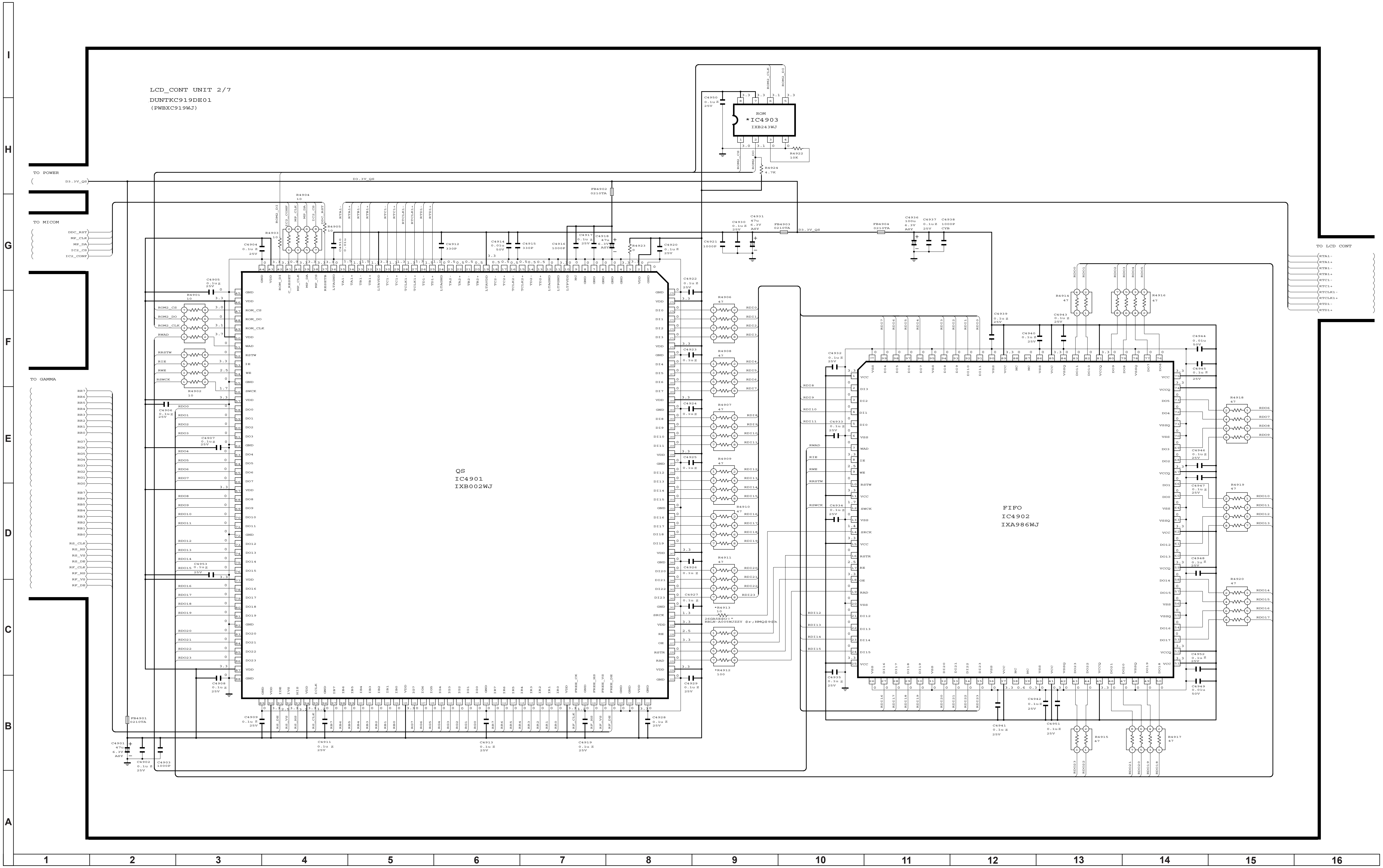
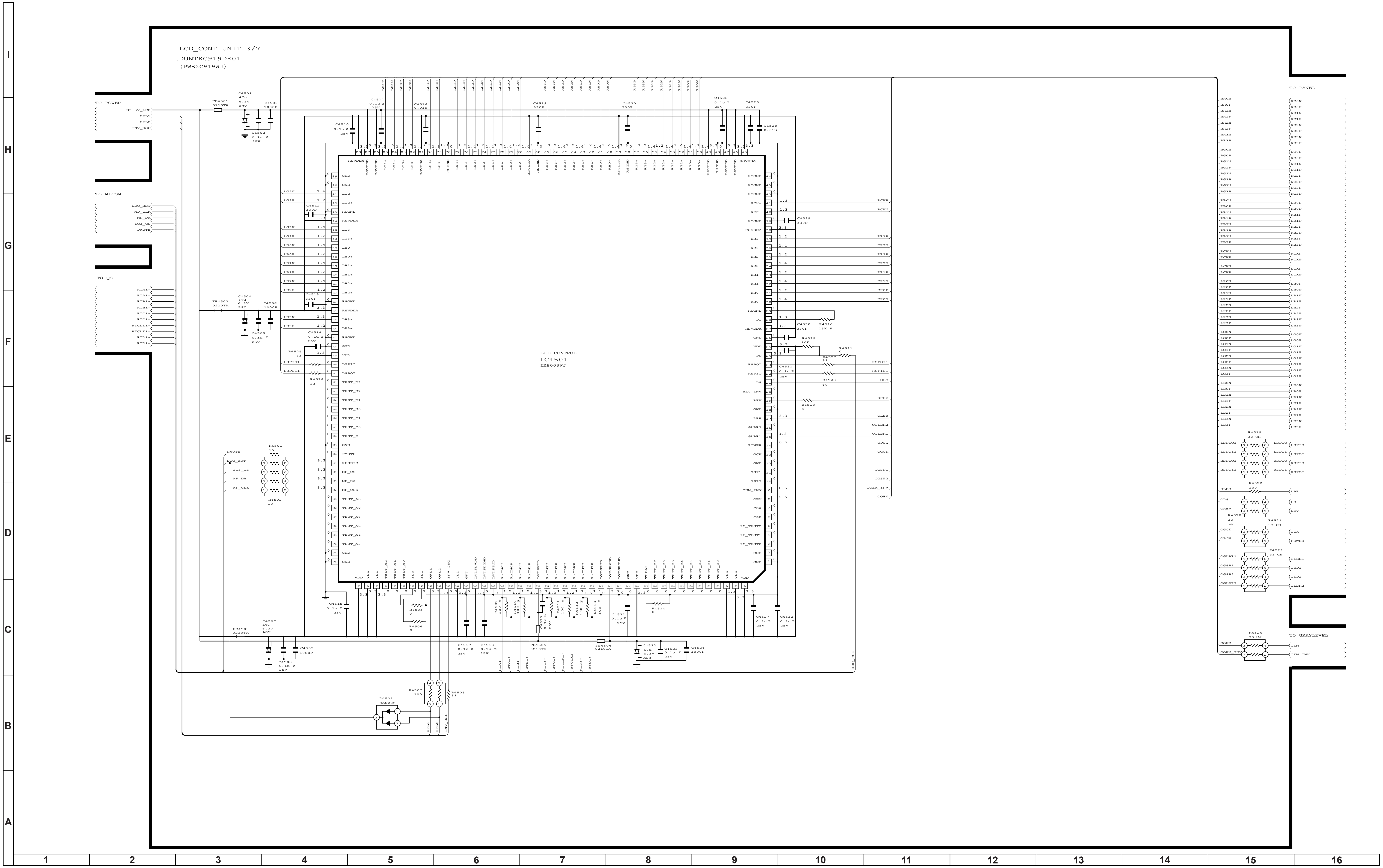
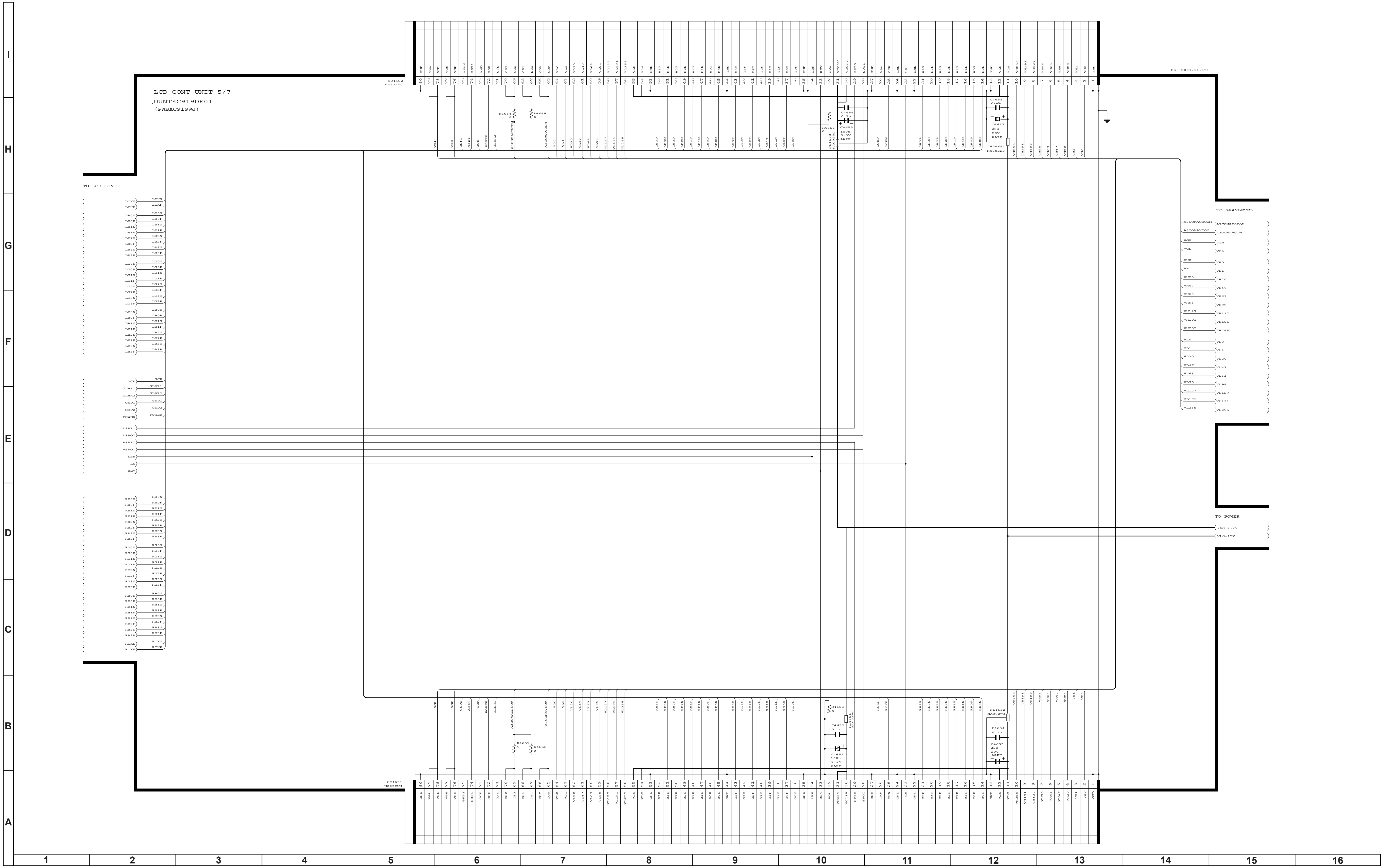
LC-26GA5E LCD Control Unit Diagram 2/7 (QS)


LCD_CONT UNIT 2/7
DUNTKC919DE01
(PWBXC919WJ)
TO POWER
D3.3V_QS
TO MICOM
DDC_RST
MP_CLK
MP_DA
IC2_CS
IC2_CONF
TO GAMMA
ROM
*IC4903
IXB243WJ
QS
IC4901
IXB002WJ
FIFO
IC4902
IXA986WJ
TO LCD CONT
RTA1-
RTA1+
RTB1-
RTB1+
RTC1-
RTC1+
RTCLK1-
RTCLK1+
RTD1-
RTD1+
FB4901
0210TA
FB4902
0210TA
FB4903
0210TA
FB4904
0210TA
C4901
47u
6.3V
ASY
C4902
0.1u Z
25V
C4903
1000P
R4901
10
R4902
10
R4903
10
R4904
10
R4905
10
R4922
10K
R4924
4.7K
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

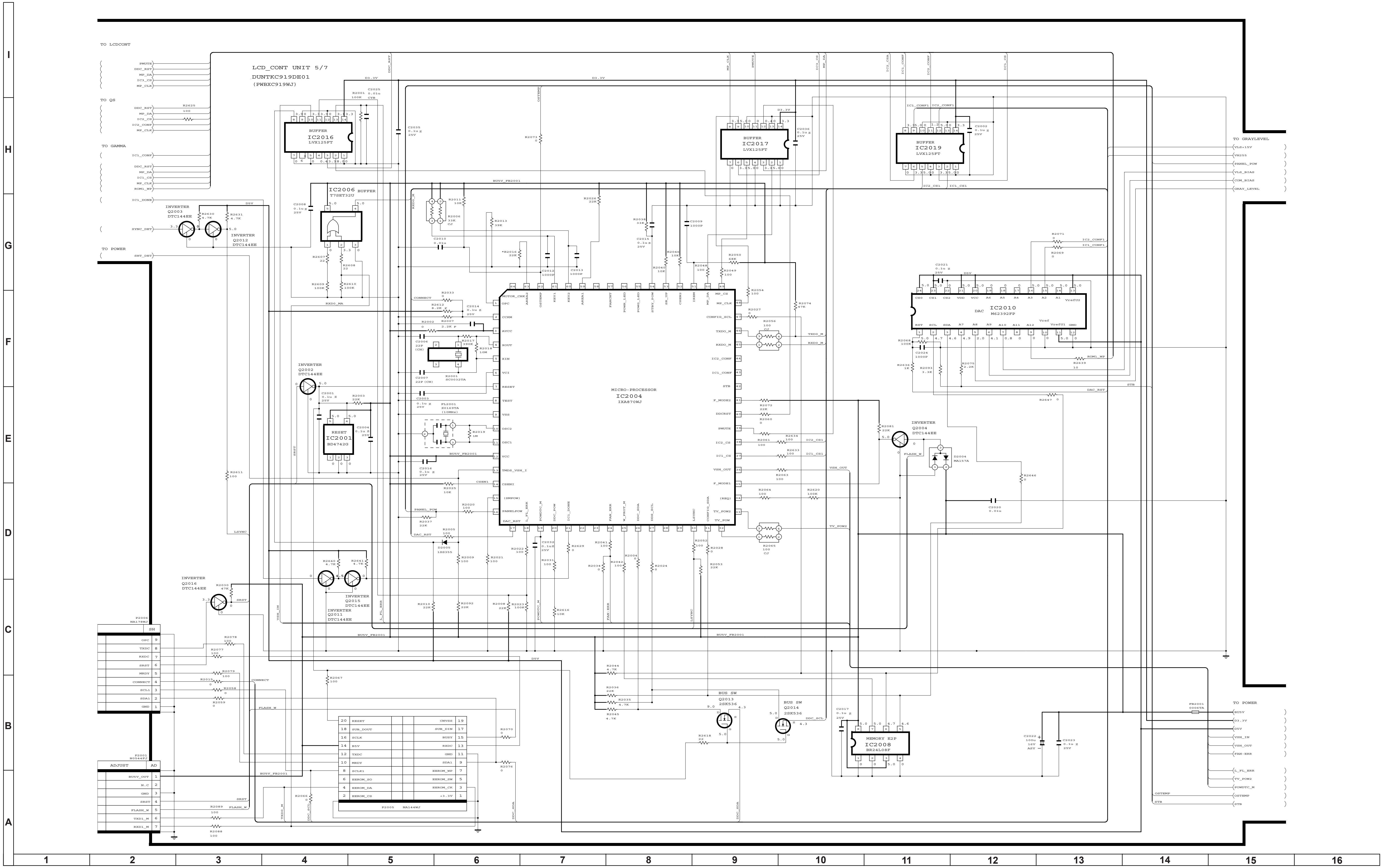
LC-26GA5E LCD Control Unit Diagram 3/7 (LCD CONTROL)


LCD_CONT UNIT 3/7
DUNTKC919DE01
(PWBXC919WJ)
TO POWER
D3.3V_LCD
OFL1
OFL2
INV_OSC
TO MICOM
DDC_RST
MP_CLK
MP_DA
IC3_CS
PMUTE
TO QS
RTA1-
RTA1+
RTB1-
RTB1+
RTC1-
RTC1+
RTCLK1-
RTCLK1+
RTD1-
RTD1+
FB4501
0210TA
C4501
47u
6.3V
ASY
C4502
0.1u Z
25V
C4503
1000P
FB4502
0210TA
C4504
C4505
C4506
FB4503
C4507
C4508
C4509
C4510
C4511
C4512
C4513
C4514
C4515
C4516
C4517
C4518
C4519
C4520
C4521
C4522
C4523
C4524
C4525
C4526
C4527
C4528
C4529
C4530
C4531
C4532
FB4504
FB4505
R4501
R4502
R4505
R4506
R4507
R4508
R4509
R4510
R4511
R4512
R4513
R4514
R4516
R4518
R4525
R4526
R4527
R4528
R4529
R4531
D4501
DAN222
LCD CONTROL
IC4501
IXB003WJ
RSVDDA
RSVDDD
RSGND
GND
VDD
LSPIO
LSPOI
RSPOI
RSPIO
TEST_D3
TEST_D2
TEST_D1
TEST_D0
TEST_C1
TEST_C0
TEST_E
PMUTE
RESETB
MP_CS
MP_DA
MP_CLK
TEST_A8
TEST_A7
TEST_A6
TEST_A5
TEST_A4
TEST_A3
PI
PD
LS
REV_INV
REV
LRR
GLRR2
GLRR1
POWER
GCK
GSP1
GSP2
OEM_INV
OEM
CSA
CSB
IC_TEST2
IC_TEST1
IC_TEST0
DDC_RST
TO PANEL
RR0N
RR0P
RR1N
RR1P
RR2N
RR2P
RR3N
RR3P
RG0N
RG0P
RG1N
RG1P
RG2N
RG2P
RG3N
RG3P
RB0N
RB0P
RB1N
RB1P
RB2N
RB2P
RB3N
RB3P
RCKN
RCKP
LCKN
LCKP
LR0N
LR0P
LR1N
LR1P
LR2N
LR2P
LR3N
LR3P
LG0N
LG0P
LG1N
LG1P
LG2N
LG2P
LG3N
LG3P
LB0N
LB0P
LB1N
LB1P
LB2N
LB2P
LB3N
LB3P
R4519
33 CH
LSPIO1
LSPOI1
RSPIO1
RSPOI1
LSPIO
LSPOI
RSPIO
RSPOI
R4522
100
OLRR
OLS
OREV
LRR
LS
REV
R4520
33 CJ
R4521
33 CJ
OGCK
OPOW
GCK
POWER
R4523
33 CH
OGLRR1
OGSP1
OGSP2
OGLRR2
GLRR1
GSP1
GSP2
GLRR2
R4524
33 CJ
TO GRAYLEVEL
OOEM
OOEM_INV
OEM
OEM_INV
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

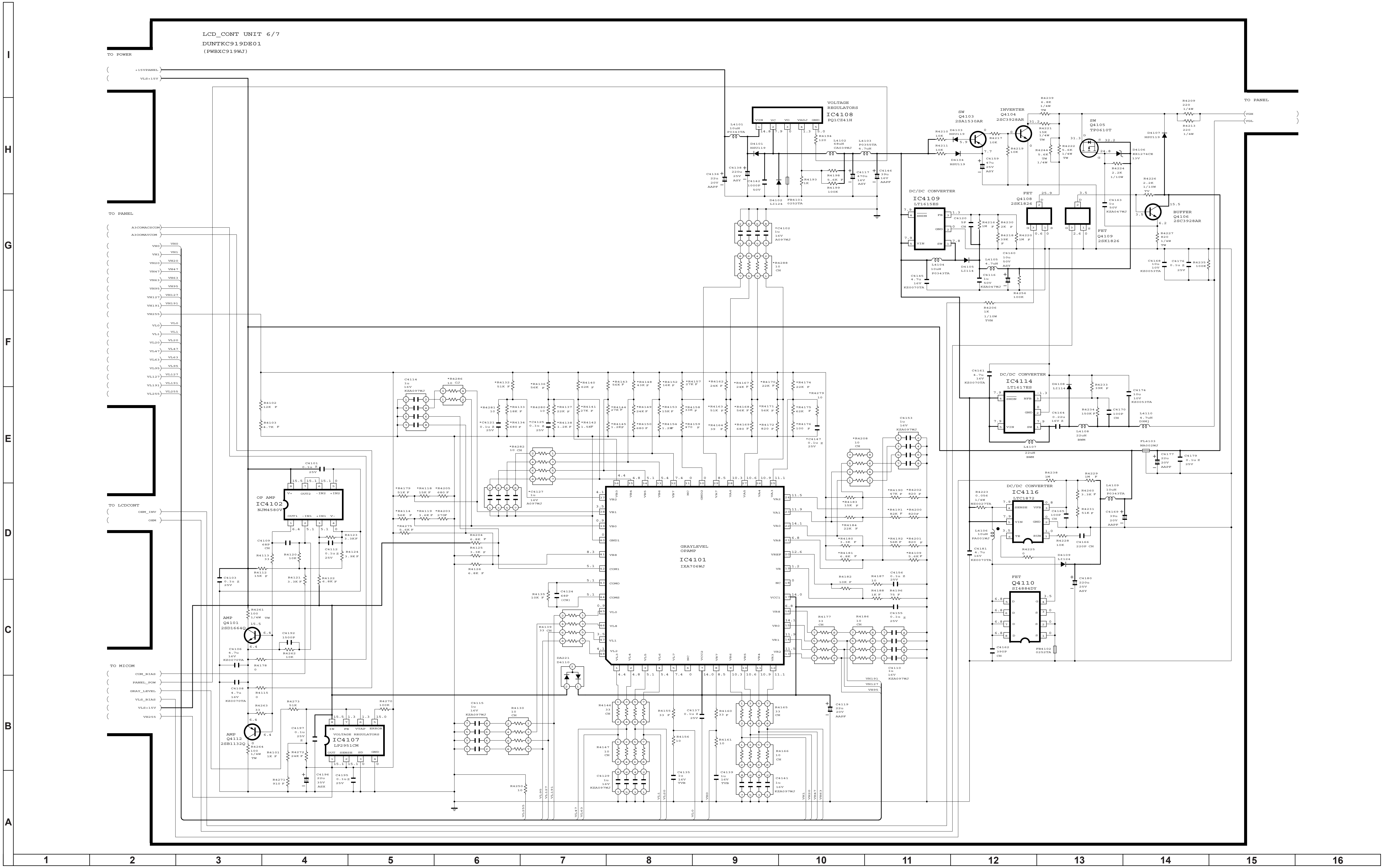
LC-26GA5E LCD Control Unit Diagram 4/7 (PANEL)


LCD_CONT UNIT 5/7
DUNTKC919DE01
(PWBXC919WJ)
SC4652
HA222WJ
SC4651
HA222WJ
R4654
R4655
R4656
R4651
R4652
R4653
C4658
C4657
C4656
C4655
C4654
C4653
C4652
C4651
FL4654
NA002WJ
FL4653
FL4652
FL4651
TO LCD CONT
TO GRAYLEVEL
TO POWER
VDH+3.3V
VLS+15V
A3COMACSCOM
A3COMAVCOM
VGH
VGL
VH0
VH1
VH20
VH47
VH63
VH95
VH127
VH191
VH255
VL0
VL1
VL20
VL47
VL63
VL95
VL127
VL191
VL255
LCKN
LCKP
GCK
GLRR1
GLRR2
GSP1
GSP2
POWER
LSPIO
LSPO1
RSPIO
RSPO1
LRR
LS
REV
RCKN
RCKP
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

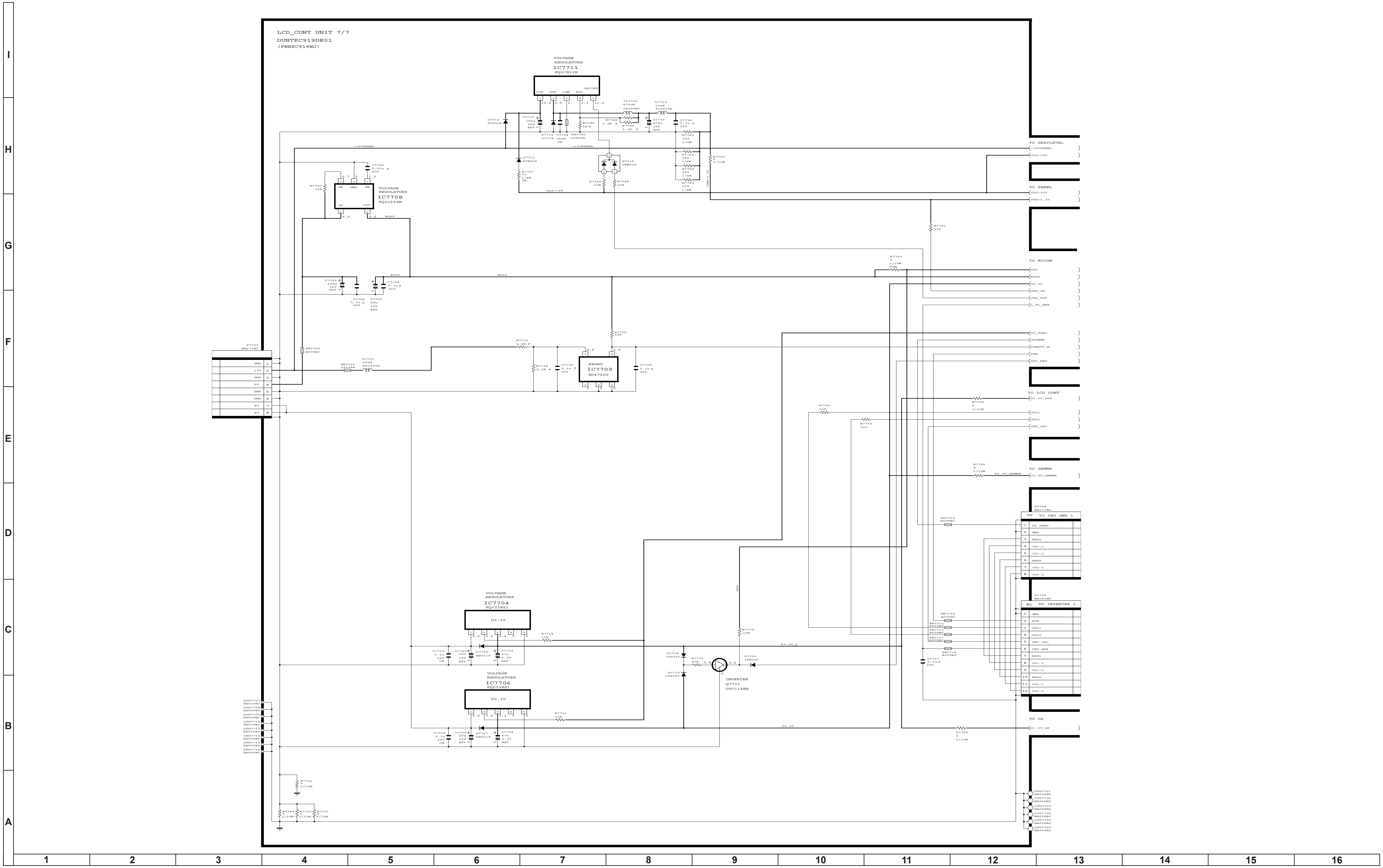
LC-26GA5E LCD Control Unit Diagram 5/7 (MICOM)


LCD_CONT UNIT 5/7
DUNTKC919DE01
(PWBXC919WJ)
TO LCDCONT
TO QS
TO GAMMA
TO POWER
TO GRAYLEVEL
BUFFER IC2016 LVX125FT
IC2006 BUFFER T7SET32U
BUFFER IC2017 LVX125FT
BUFFER IC2019 LVX125FT
MICRO-PROCESSOR IC2004 IXA870WJ
DAC IC2010 M62392FP
RESET IC2001 BD4742G
MEMORY E2P IC2008 BR24L08F
INVERTER Q2003 DTC144EE
INVERTER Q2012 DTC144EE
INVERTER Q2002 DTC144EE
INVERTER Q2004 DTC144EE
INVERTER Q2016 DTC144EE
INVERTER Q2015 DTC144EE
INVERTER Q2011 DTC144EE
BUS SW Q2013 2SK536
BUS SW Q2014 2SK536
D2004 MA157A
D2005 1SS355
X2001 SC0032TA
FL2001 S0169TA (10MHz)
P2004 NA178WJ
SH
P2001 B0544FJ
ADJUST
AD
P2005 HA144WJ
FB2001 0006TA
BUSV_FB2001
D3.3V
D5V
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I

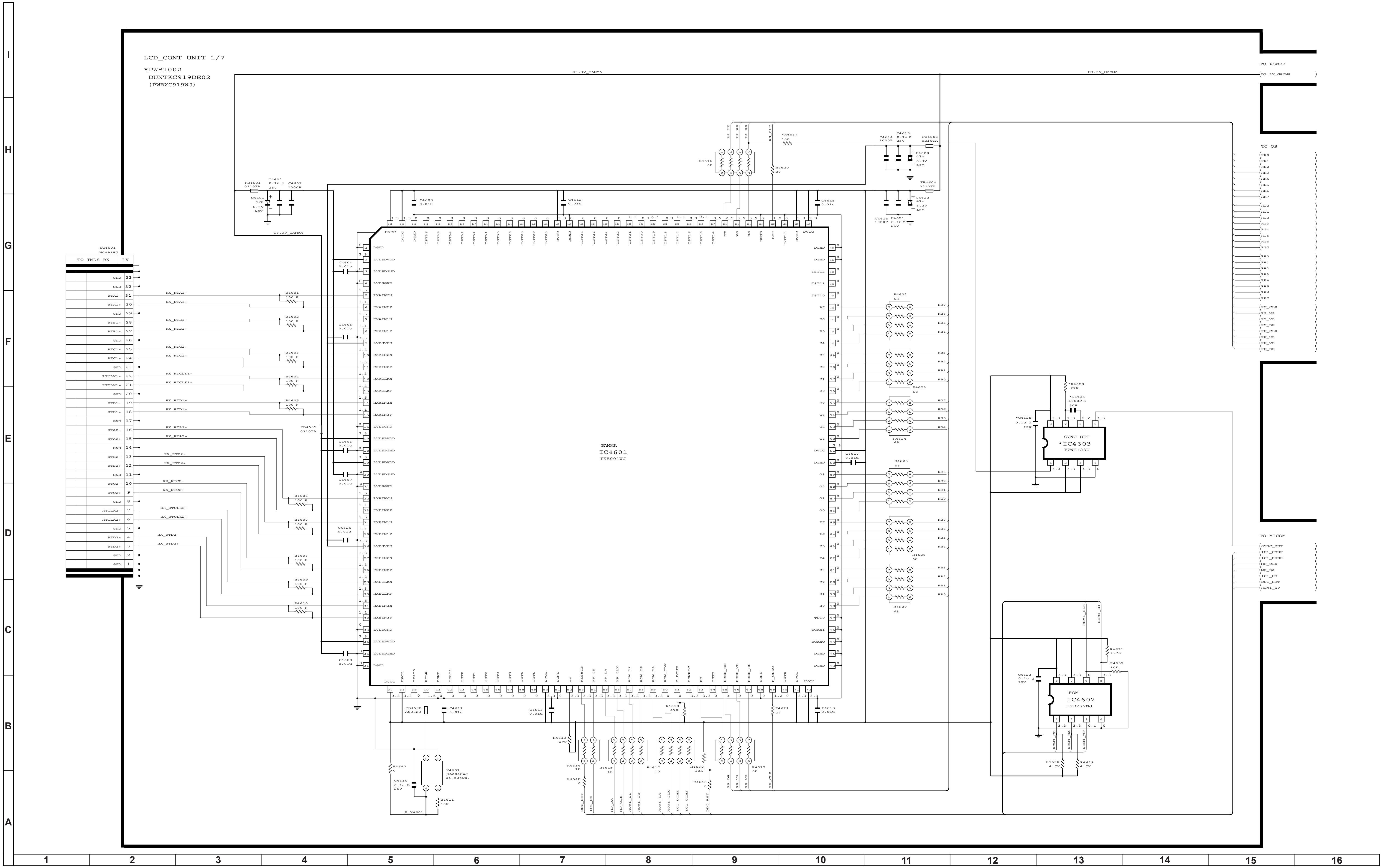
LC-26GA5E LCD Control Unit Diagram 6/7 (GRAYLEVEL)


LCD_CONT UNIT 6/7
DUNTKC919DE01
(PWBXC919WJ)
TO POWER
+15VPANEL
VLS+15V
TO PANEL
A3COMAC6COM
A3COMAVCOM
VH0
VH1
VH20
VH47
VH63
VH95
VH127
VH191
VH255
VL0
VL1
VL20
VL47
VL63
VL95
VL127
VL191
VL255
TO LCDCONT
OSM_INV
OSM
TO MICOM
COM_BIAS
PANEL_POW
GRAY_LEVEL
VLS_BIAS
VLS+15V
VH255
VOLTAGE REGULATORS
IC4108
PQ1C241H
OP AMP
IC4102
NJM4580V
GRAYLEVEL OPAMP
IC4101
IXA706WJ
VOLTAGE REGULATORS
IC4107
LP2951CM
AMP
Q4101
2SD1664Q
AMP
Q4112
2SB1132Q
DC/DC CONVERTER
IC4109
LT1615ES
SW
Q4103
2SA1530AR
INVERTER
Q4104
2SC3928AR
SW
Q4105
TP0610T
FET
Q4108
2SK1826
FET
Q4109
2SK1826
BUFFER
Q4106
2SC3928AR
DC/DC CONVERTER
IC4114
LT1617ES
DC/DC CONVERTER
IC4116
LTC1872
FET
Q4110
SI4884DY
TO PANEL
VGH
VGL
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

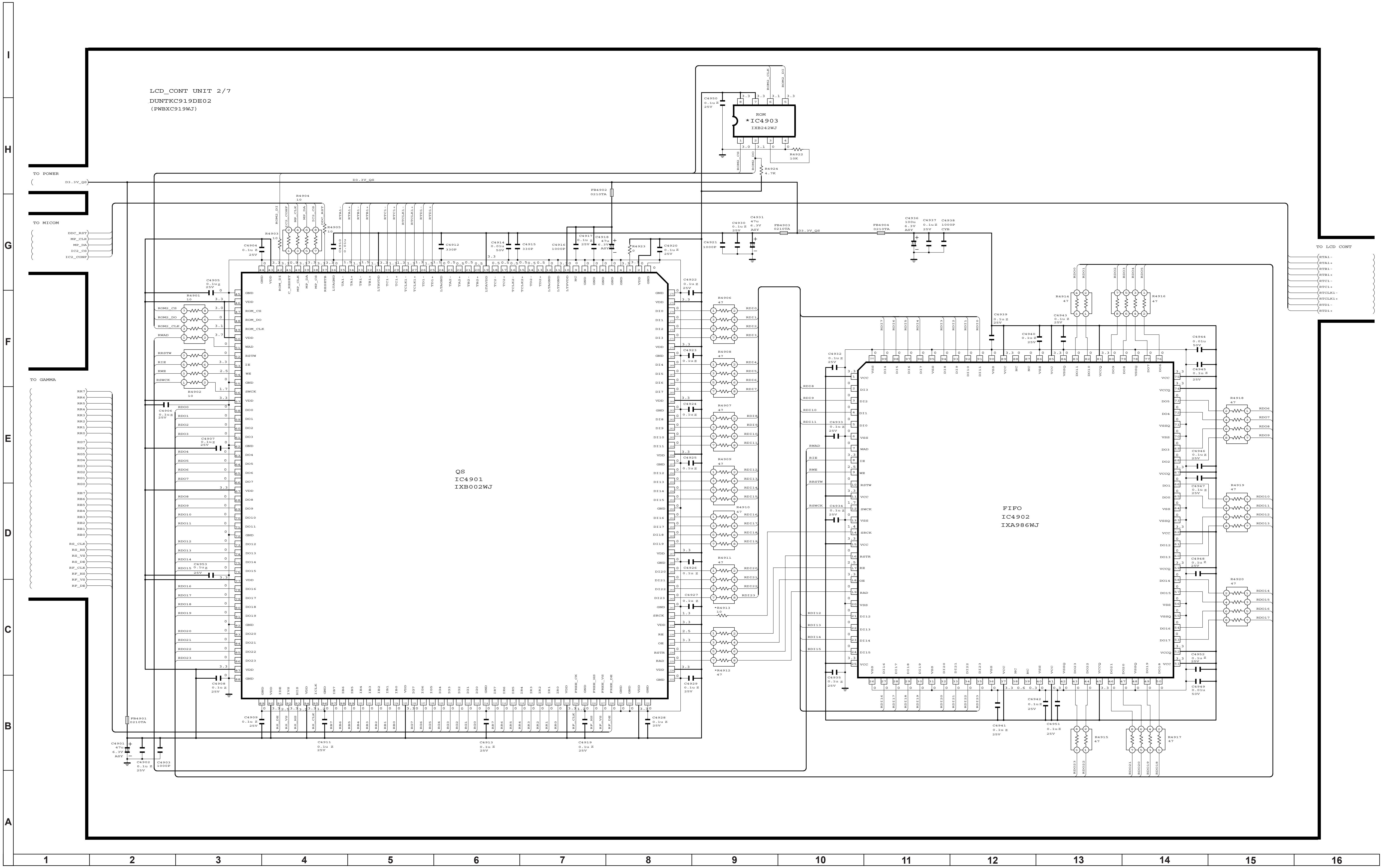
LC-26GA5E LCD Control Unit Diagram 7/7 (POWER)


LCD_CONT UNIT 7/7
DUNTKC919DE01
(PWBXC919WJ)
VOLTAGE REGULATORS
IC7711
PQ1CZ21H
VIN OUT COM ADJ ON/OFF
12.6 3.5 0 1.3 11.0
*L7712 470uH CA095WJ
L7713 10uH P0343TA
D7712 SC8024
C7733 100u 25V ASY
D7714 LI114
C7734 680P CH
FB7720 0252TA
R7745 1K F
R7744 3.3K F
R7746 3.3K F
C7735 470u 16V ASY
C7736 0.1u Z 25V
R7760 220 1/4W
R7761 220 1/4W
R7762 220 1/4W
R7763 220 1/4W
R7750 0 1/10W
VSH+3.3V
+15VPANEL
D7713 SC8024
R7747 33 1/4W TW
D7715 DAN222
R7749 10K
R7748 10K
VLS+15V
C7725 0.01u K 50V
R7725 10K
VOLTAGE REGULATORS
IC7708
PQ1L503M
ON GND NR
IN OUT
5.7 0 1.3
6.0 5.0 BU5V
C7701 100u 16V ASY
C7702 0.1u Z 25V
C7703 22u 16V ASX
C7704 0.1u Z 25V
BU5V
P7707 NA177WJ
GND 1
13V 2
GND 3
6V 4
GND 5
GND 6
4V 7
4V 8
FB7709 A005WJ
FB7710 0210TA
L7701 10uH P0343TA
R7733 3.6K F
R7734 2.2K F
C7728 0.1u Z 25V
RESET
IC7709
BD4742G
4.9 5.0
C7729 0.1u Z 25V
R7735 22K
TO GRAYLEVEL
+15VPANEL
VLS+15V
TO PANEL
VLS+15V
VSH+3.3V
R7721 100
R7723 0 1/10W TVN
TO MICOM
D5V
BU5V
D3.3V
VSH_IN
VSH_OUT
L_FL_ERR
TV_POW2
OSTEMP
POWDTC_M
STB
SHT_DET
TO LCD CONT
D3.3V_LCD
R7755 0 1/10W
R7751 100
R7752 100
OFL1
OFL2
INV_OSC
TO GAMMA
R7756 0 1/10W
D3.3V_GAMMA
P7704 NA177WJ
GV TO INV GND 1
1 OS TEMP
2 GND
3 REG1
4 IS1-1
5 IS1-2
6 REG2
7 IS2-1
8 IS2-2
FB7719 A005WJ
P7705 NA181WJ
BL TO INVERTER 1
1 GND
2 STB
3 OFL1
4 OFL2
5 INV OSC
6 INV ERR
7 REG1
8 IS1-1
9 IS1-2
10 REG2
11 IS2-1
12 IS2-2
FB7716 A005WJ
FB7712 A005WJ
FB7713 A005WJ
FB7717 A005WJ
FB7718 A005WJ
C7737 0.1u Z 25V
TO OS
D3.3V_QS
R7759 0 1/10W
VOLTAGE REGULATORS
IC7704
PQ033EZ1
D3.3V
4.0 3.5 3.3 0 0
R7714 10K
C7713 0.1u 25V CH
C7707 22u 16V ASY
D7705 HSU119
C7723 47u 6.3V ASY
VOLTAGE REGULATORS
IC7706
PQ033EZ1
D3.3V
4.0 3.5 3.3 0 0
R7711 10K
C7715 0.1u 25V CH
C7709 22u 16V ASY
D7707 HSU119
C7724 47u 6.3V ASY
D5V
R7770 10K
D3.3V_2
D7718 1SS355
D7719 1SS355
R7771 47K
0.8 5.0 0
D7720 1SS355
INVERTER
Q7701
DTC114EE
D3.3V
LUG7707 ZA002WJ
LUG7708 ZA002WJ
LUG7709 ZA002WJ
LUG7710 ZA002WJ
LUG7711 ZA002WJ
LUG7712 ZA002WJ
LUG7713 ZA002WJ
LUG7714 ZA002WJ
R7732 0 1/10W
R7729 0 1/10W
R7730 0 1/10W
R7731 0 1/10W
LUG7701 HA006WJ
LUG7702 HA006WJ
LUG7703 HA006WJ
LUG7704 HA006WJ
LUG7705 HA006WJ
LUG7706 HA006WJ
I
H
G
F
E
D
C
B
A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

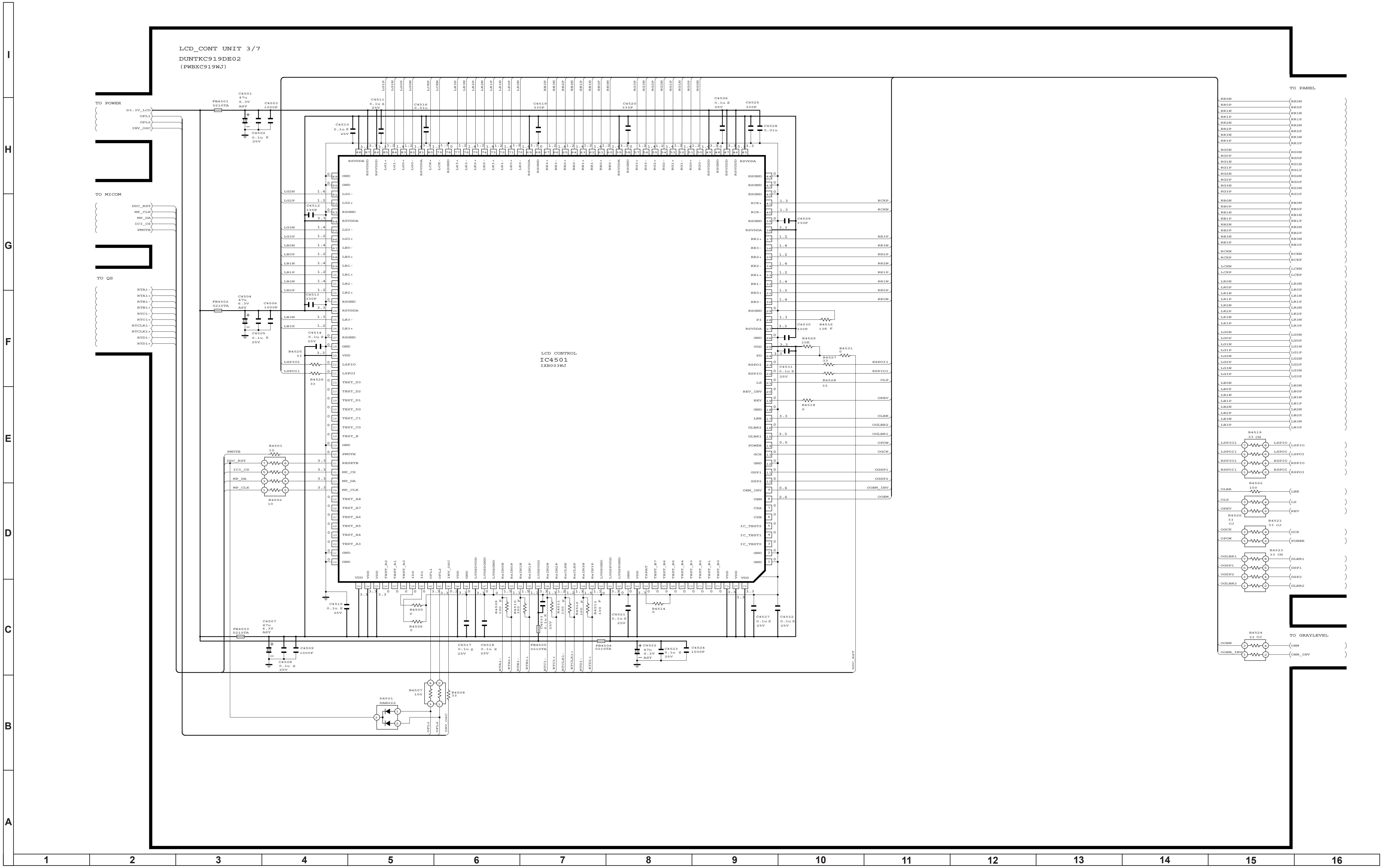
LC-32GA5E LCD Control Unit Diagram 1/7 (GAMMA)


LCD_CONT UNIT 1/7
*PWB1002
DUNTKC919DE02
(PWBXC919WJ)
D3.3V_GAMMA
TO POWER
TO QS
RR0
RR1
RR2
RR3
RR4
RR5
RR6
RR7
RG0
RG1
RG2
RG3
RG4
RG5
RG6
RG7
RB0
RB1
RB2
RB3
RB4
RB5
RB6
RB7
RS_CLK
RS_HS
RS_VS
RS_DE
RF_CLK
RF_HS
RF_VS
RF_DE
TO MICOM
SYNC_DET
IC1_CONF
IC1_DONE
MP_CLK
MP_DA
IC1_CS
DDC_RST
ROM1_WP
SC4601
N0491FJ
TO TMDS RX
LV
GAMMA
IC4601
IXB001WJ
SYNC DET
*IC4603
T7WH123U
ROM
IC4602
IXB272WJ
X4601
UAA048WJ
83.565MHz
B_X4601
FB4601
FB4602
FB4603
FB4604
FB4605
A B C D E F G H I
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

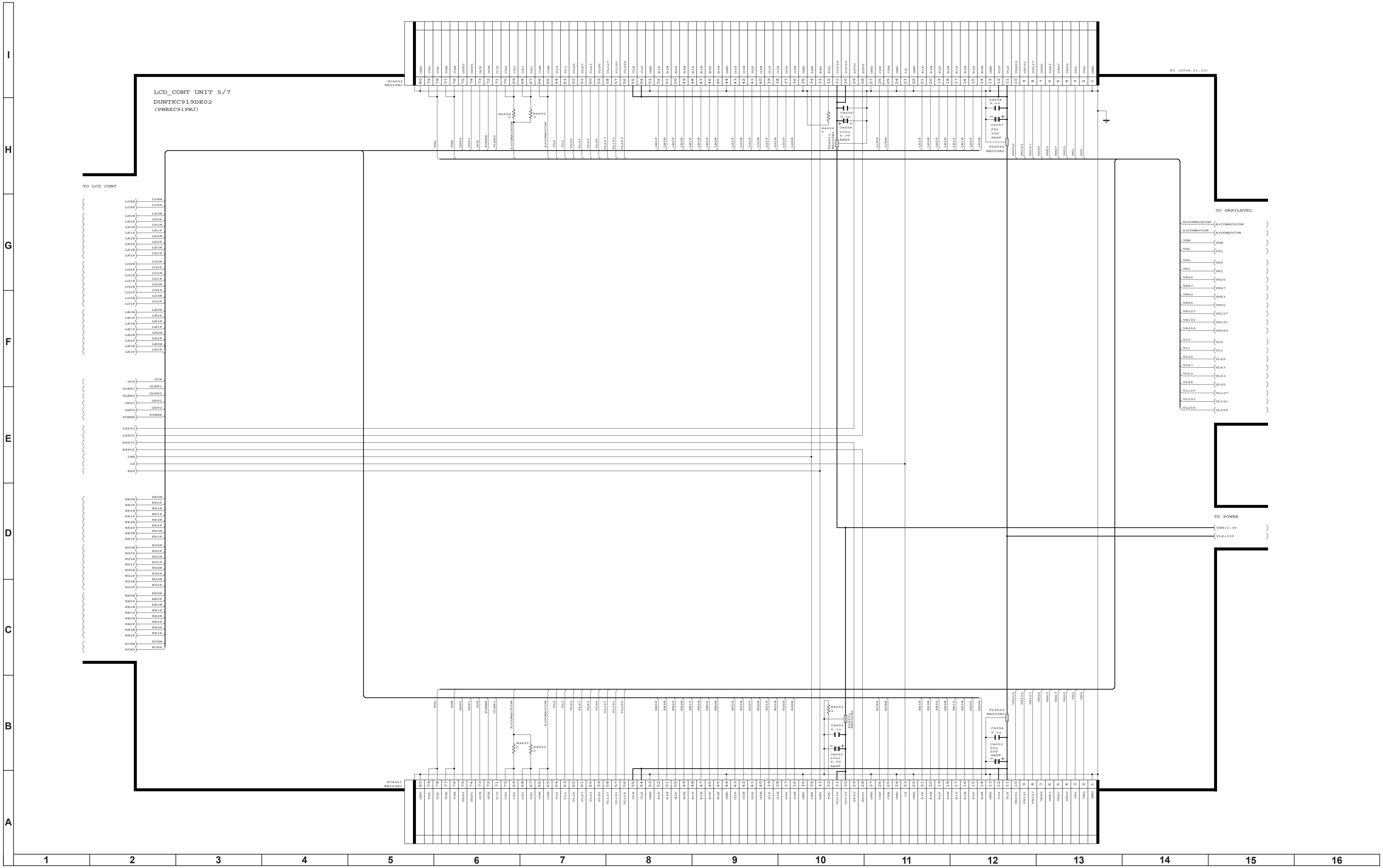
LC-32GA5E LCD Control Unit Diagram 2/7 (QS)


LCD_CONT UNIT 2/7
DUNTKC919DE02
(PWBXC919WJ)
TO POWER
D3.3V_QS
TO MICOM
DDC_RST
MP_CLK
MP_DA
IC2_CS
IC2_CONF
TO GAMMA
TO LCD CONT
ROM
*IC4903
IXB242WJ
QS
IC4901
IXB002WJ
FIFO
IC4902
IXA986WJ
FB4901
FB4902
FB4903
FB4904
0210TA
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

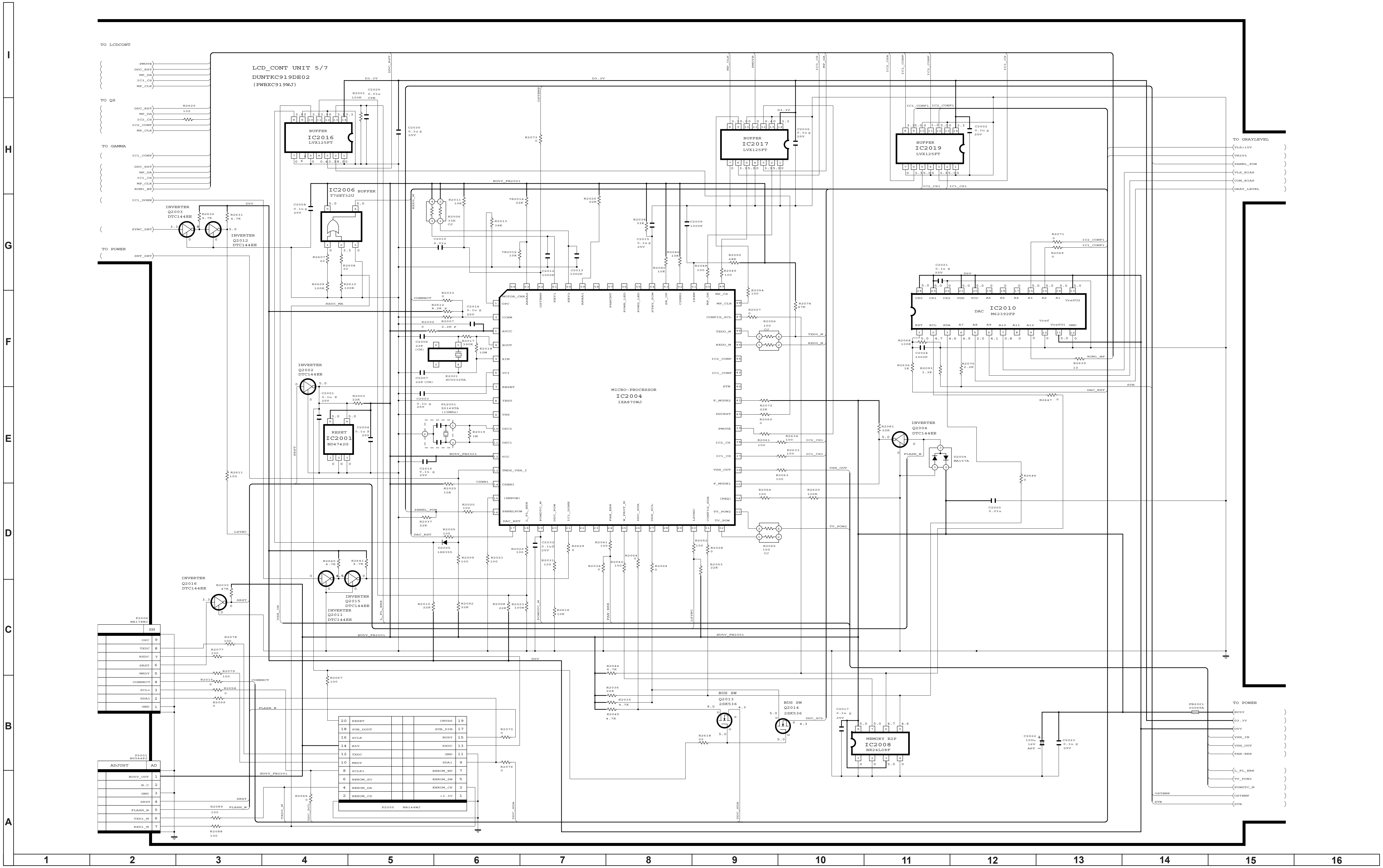
LC-32GA5E LCD Control Unit Diagram 3/7 (LCD CONTROL)


LCD_CONT UNIT 3/7
DUNTKC919DE02
(PWBXC919WJ)
TO POWER
D3.3V_LCD
OPFL1
OPFL2
INV_OSC
TO MICOM
DDC_RST
MP_CLK
MP_DA
IC3_CS
PMUTE
TO QS
RTA1-
RTA1+
RTB1-
RTB1+
RTC1-
RTC1+
RTCLK1-
RTCLK1+
RTD1-
RTD1+
TO PANEL
TO GRAYLEVEL
OGM
OGM_INV
LCD CONTROL
IC4501
IXB003WJ
FB4501 0210TA
FB4502 0210TA
FB4503 0210TA
FB4504 0210TA
FB4505 0210TA
C4501 47u 6.3V ASY
C4502 0.1u Z 25V
C4503 1000P
C4504 47u 6.3V ASY
C4505 0.1u Z 25V
C4506 1000P
C4507 47u 6.3V ASY
C4508 0.1u Z 25V
C4509 1000P
C4510 0.1u Z 25V
C4511 0.1u Z 25V
C4512 330P
C4513 330P
C4514 0.1u Z 25V
C4515 0.1u Z 25V
C4516 0.01u
C4517 0.1u Z 25V
C4518 0.1u Z 25V
C4519 330P
C4520 330P
C4521 0.1u Z 25V
C4522 47u 6.3V ASY
C4523 0.1u Z 25V
C4524 1000P
C4525 330P
C4526 0.1u Z 25V
C4527 0.1u Z 25V
C4528 0.01u
C4529 330P
C4530 330P
C4531 0.1u Z 25V
C4532 0.1u Z 25V
R4501 10
R4502 10
R4505 0
R4506 0
R4507 100
R4508 33
R4514 0
R4516 13K F
R4518 0
R4519 33 CH
R4520 33 CJ
R4521 33 CJ
R4522 100
R4523 33 CH
R4524 33 CJ
R4525 33
R4526 33
R4527 33
R4528 33
R4529 10K
R4531 0
D4501 DAN222
LG2N LG2P LG3N LG3P LB0N LB0P LB1N LB1P LB2N LB2P LB3N LB3P
LSPIO1 LSPOI1 RSPIO1 RSPOI1
RCKP RCKN RR3P RR3N RR2P RR2N RR1P RR1N RR0P RR0N
OLS OREV OLBR OGLBR2 OGLBR1 OPOW OGCK OGSP1 OGSP2 OGM_INV OGM
GND RSGND RSVDDA VDD PD PI LS REV_INV REV LBR GLBR2 GLBR1 POWER GCK GSP1 GSP2 OGM_INV OGM CSA CSB IC_TEST2 IC_TEST1 IC_TEST0
RESETB MP_CS MP_DA MP_CLK PMUTE TEST_D3 TEST_D2 TEST_D1 TEST_D0 TEST_C1 TEST_C0 TEST_E TEST_A8 TEST_A7 TEST_A6 TEST_A5 TEST_A4 TEST_A3
DDC_RST
I H G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

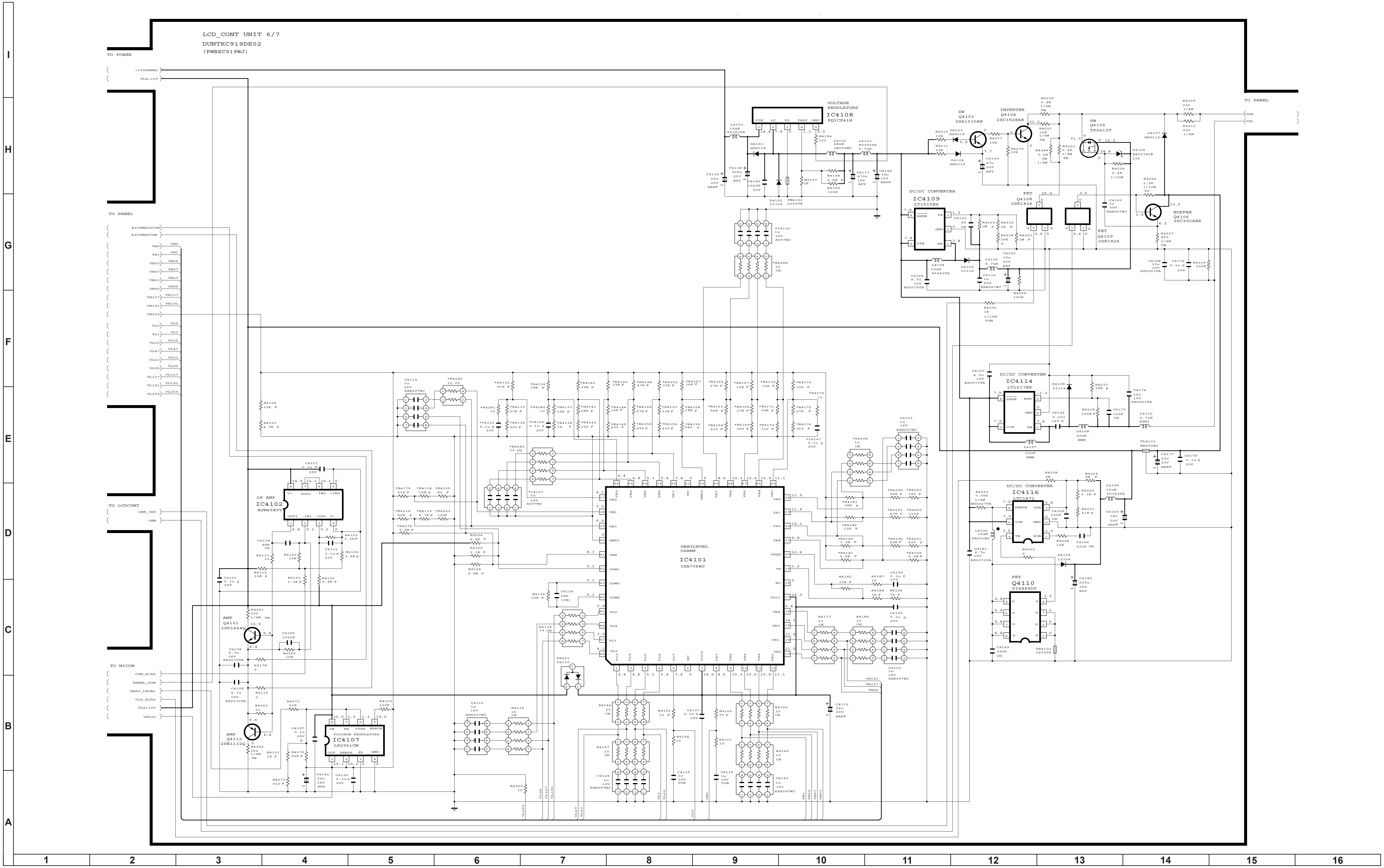
LC-32GA5E LCD Control Unit Diagram 4/7 (PANEL)


LCD_CONT UNIT 5/7
DUNTKC919DE02
(PWBXC919WJ)
SC4652
NA222WJ
SC4651
NA222WJ
03 (2004.11.19)
TO LCD CONT
TO GRAYLEVEL
TO POWER
VSH+3.3V
VLS+15V
R4654 0
R4655 0
R4656 0
R4651 0
R4652 0
R4653 0
C4658 0.1u
C4657 22u 20V AAPF
FL4654 NA002WJ
C4656 0.1u
C4655 100u 6.3V AAPF
FL4653 NA002WJ
C4654 0.1u
C4653 22u 20V AAPF
FL4652 NA002WJ
C4652 0.1u
C4651 100u 6.3V AAPF
FL4651 NA002WJ
A3COMACSCOM
A3OOMAVCOM
VGH
VGL
VH0
VH1
VH20
VH47
VH63
VH95
VH127
VH191
VH255
VL0
VL1
VL20
VL47
VL63
VL95
VL127
VL191
VL255
GCK
GLBR1
GLBR2
GSP1
GSP2
POWER
LSPIO
LSPOI
RSPIO
RSPOI
LBR
LS
REV
LCKN
LCKP
RCKN
RCKP
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

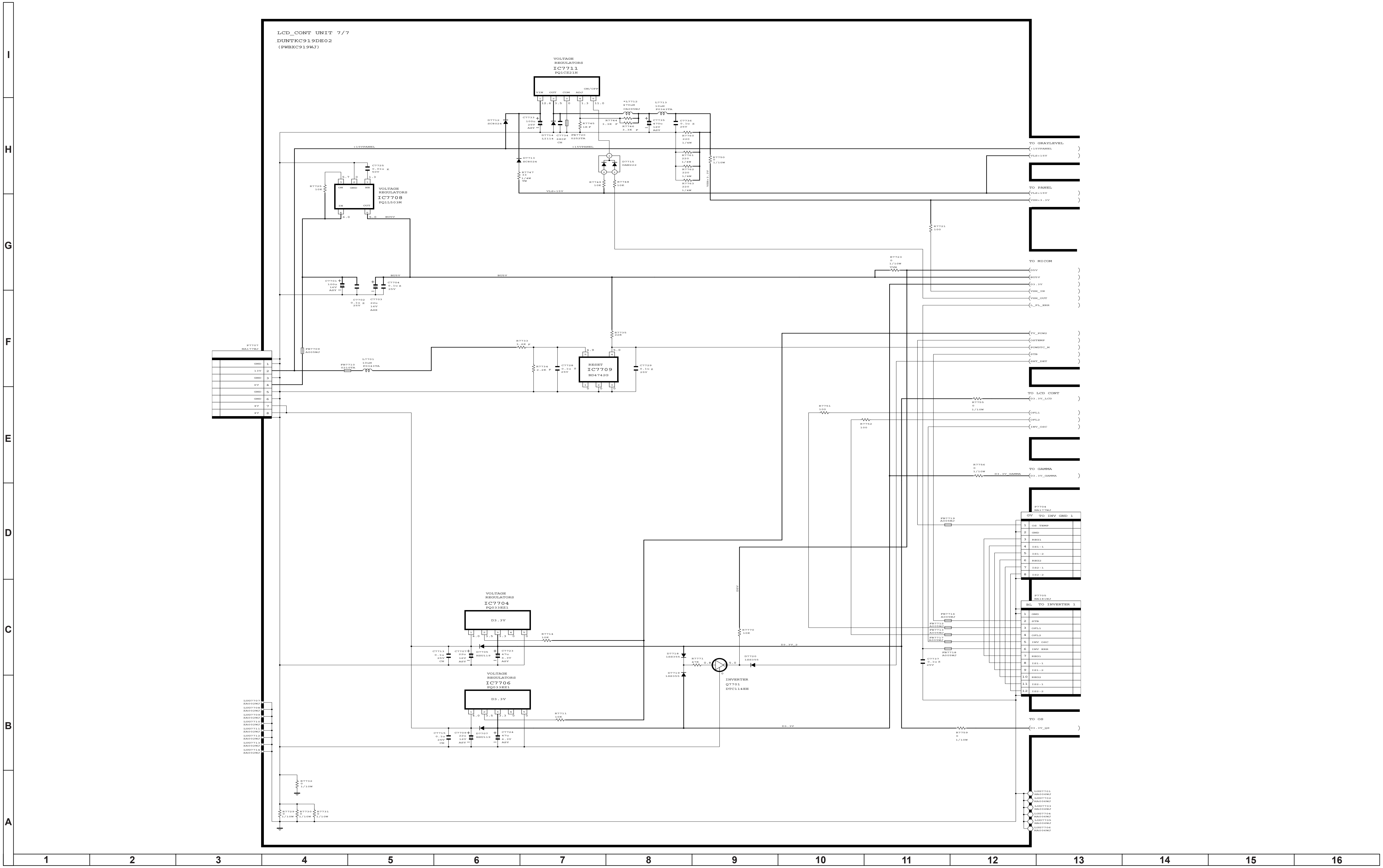
LC-32GA5E LCD Control Unit Diagram 5/7 (MICOM)


LCD_CONT UNIT 5/7
DUNTKC919DE02
(PWBXC919WJ)
TO LCDCONT
TO Q8
TO GAMMA
TO POWER
TO GRAYLEVEL
BUFFER IC2016 LVX125FT
BUFFER IC2017 LVX125FT
BUFFER IC2019 LVX125FT
IC2006 BUFFER T7SET32U
DAC IC2010 M62392FP
MICRO-PROCESSOR IC2004 IXA870WJ
RESET IC2001 BD4742G
MEMORY E2P IC2008 BR24L08F
INVERTER Q2003 DTC144EE
INVERTER Q2012 DTC144EE
INVERTER Q2002 DTC144EE
INVERTER Q2004 DTC144EE
INVERTER Q2016 DTC144EE
INVERTER Q2015 DTC144EE
INVERTER Q2011 DTC144EE
BUS SW Q2013 2SK536
BUS SW Q2014 2SK536
D2004 MA157A
D2005 1SS355
X2001 EC0032TA
FL2001 Z0169TA (10MHz)
FB2001 0006TA
P2006 NA178WJ SH
P2001 B0544PJ AD
P2005 NA144WJ
A B C D E F G H I
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

LC-32GA5E LCD Control Unit Diagram 6/7 (GRAYLEVEL)


LCD_CONT UNIT 6/7
DUNTKC919DE02
(PWBXC919WJ)
TO POWER
+15VPANEL
VLS+15V
TO PANEL
A3COMACSCOM
A3COMAVCOM
VH0
VH1
VH20
VH47
VH63
VH95
VH127
VH191
VH255
VL0
VL1
VL20
VL47
VL63
VL95
VL127
VL191
VL255
TO LCDCONT
OBM_INV
OBM
TO MICOM
COM_BIAS
PANEL_POW
GRAY_LEVEL
VL0_BIAS
VLS+15V
VH255
VOLTAGE REGULATORS
IC4108
PQ1CZ41H
DC/DC CONVERTER
IC4109
LT1615ES
SW
Q4103
2SA1530AR
INVERTER
Q4104
2SC3928AR
SW
Q4105
TP0610T
FET
Q4108
2SK1826
FET
Q4109
2SK1826
BUFFER
Q4106
2SC3928AR
TO PANEL
VGH
VGL
DC/DC CONVERTER
IC4114
LT1617ES
DC/DC CONVERTER
IC4116
LTC1872
FET
Q4110
SI4884DY
OP AMP
IC4102
NJM4580V
GRAYLEVEL
OPAMP
IC4101
IXA706WJ
AMP
Q4101
2SD1664Q
AMP
Q4112
2SB1132Q
VOLTAGE REGULATORS
IC4107
LP2951CM
DA221
DA4110
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

LC-32GA5E LCD Control Unit Diagram 7/7 (POWER)


LCD_CONT UNIT 7/7
DUNTKC919DE02
(PWBXC919WJ)
VOLTAGE REGULATORS
IC7711
PQ1C221M
VOLTAGE REGULATORS
IC7708
PQ1L503M
RESET
IC7709
BD4742G
VOLTAGE REGULATORS
IC7704
PQ033EZ1
VOLTAGE REGULATORS
IC7706
PQ033EZ1
D3.3V
INVERTER
Q7701
DTC114EE
P7707
TO GRAYLEVEL
TO PANEL
TO MICOM
TO LCD CONT
TO GAMMA
P7704
TO INV GND 1
P7705
TO INVERTER 1
TO OS
+15VPANEL
VLS+15V
BUS5V
D5V
D3.3V
I
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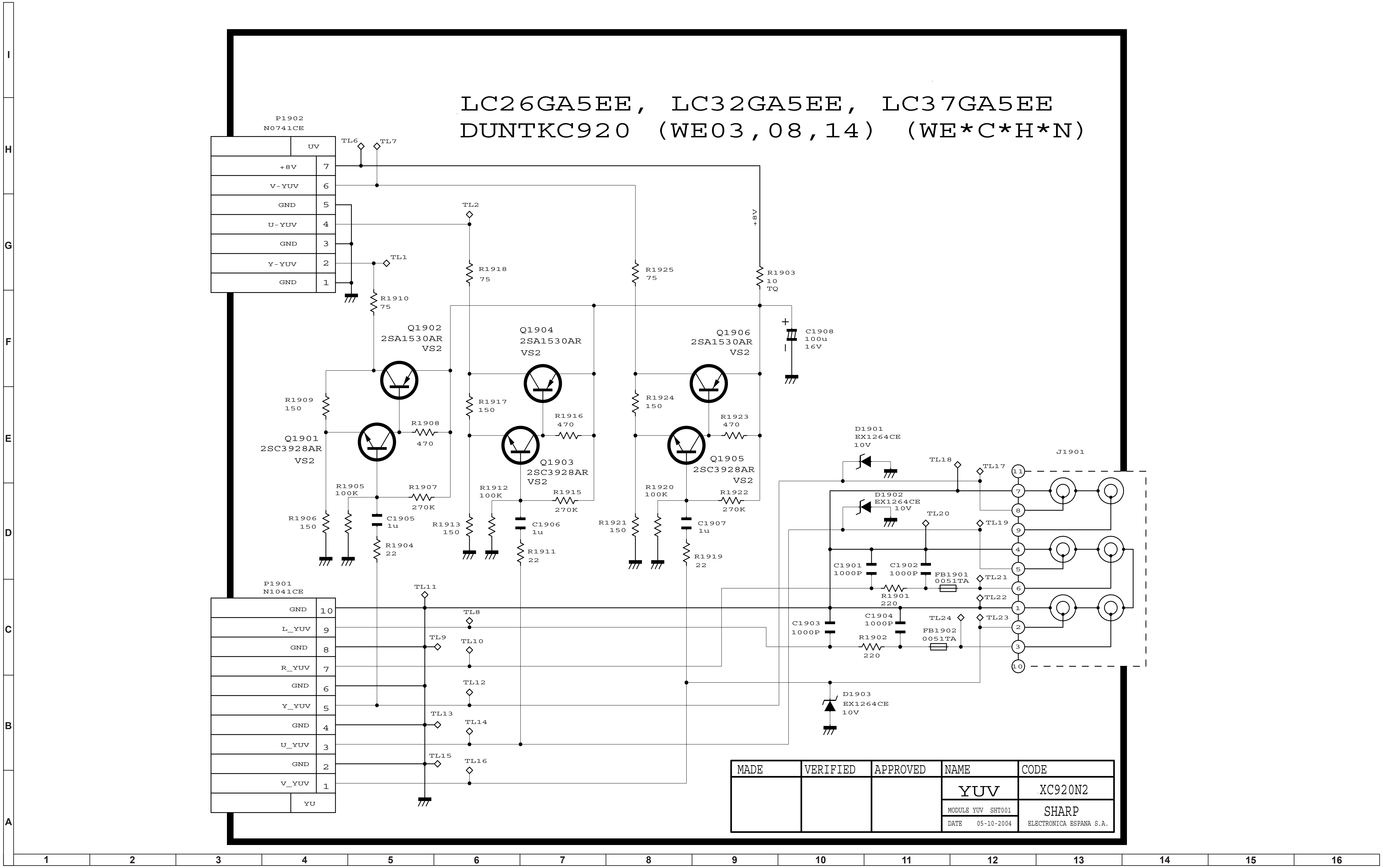
YUV Unit Diagram (YUV)


LC26GA5EE, LC32GA5EE, LC37GA5EE
DUNTKC920 (WE03,08,14) (WE*C*H*N)
P1902
N0741CE
UV
+8V 7
V-YUV 6
GND 5
U-YUV 4
GND 3
Y-YUV 2
GND 1
TL6
TL7
TL2
TL1
+8V
R1918
75
R1925
75
R1903
10
TQ
R1910
75
C1908
100u
16V
Q1902
2SA1530AR
VS2
Q1904
2SA1530AR
VS2
Q1906
2SA1530AR
VS2
R1909
150
R1917
150
R1924
150
Q1901
2SC3928AR
VS2
R1908
470
R1916
470
R1923
470
Q1903
2SC3928AR
VS2
Q1905
2SC3928AR
VS2
R1905
100K
R1907
270K
R1912
100K
R1915
270K
R1920
100K
R1922
270K
R1906
150
C1905
1u
R1913
150
C1906
1u
R1921
150
C1907
1u
R1904
22
R1911
22
R1919
22
D1901
EX1264CE
10V
D1902
EX1264CE
10V
TL18
TL17
TL20
TL19
J1901
C1901
1000P
C1902
1000P
FB1901
0051TA
R1901
220
TL21
TL22
C1903
1000P
C1904
1000P
TL24
TL23
FB1902
0051TA
R1902
220
D1903
EX1264CE
10V
11 7 8 9 4 5 6 1 2 3 10
P1901
N1041CE
GND 10
L_YUV 9
GND 8
R_YUV 7
GND 6
Y_YUV 5
GND 4
U_YUV 3
GND 2
V_YUV 1
YU
TL11
TL8
TL9
TL10
TL12
TL13
TL14
TL15
TL16
MADE
VERIFIED
APPROVED
NAME
CODE
YUV
XC920N2
MODULE YUV SHT001
DATE 05-10-2004
SHARP
ELECTRONICA ESPANA S.A.
I
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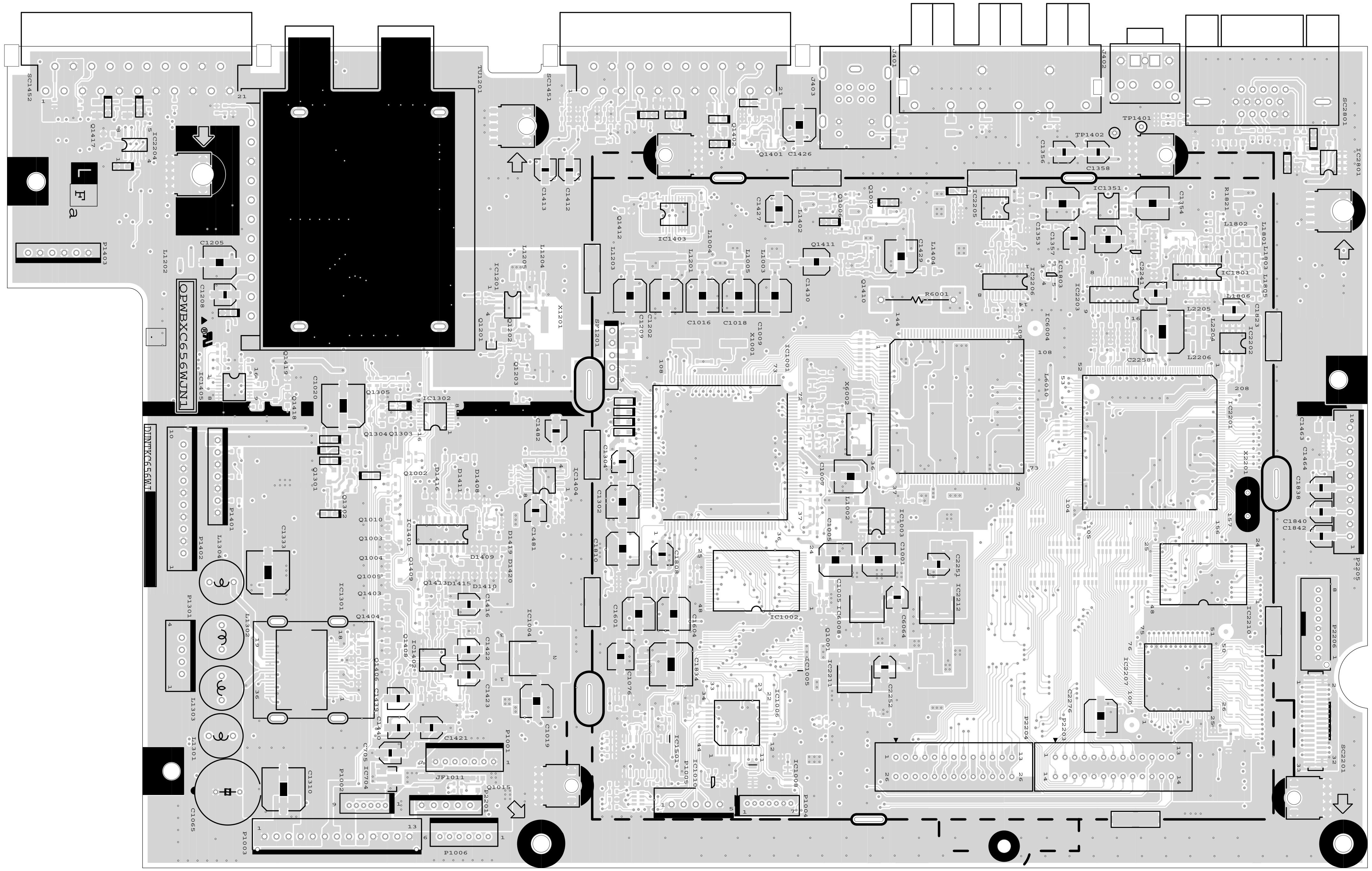
A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

PRINTED WIRING BOARD

Main Unit PWB QPWBXC656WJN1

MAIN Unit, Side A


SC1452
TU1201
SC1451
J403
J401
J402
SC2801
IC2801
TP1401
TP1402
C1356
C1358
IC1351
C1354
R1821
L1802
L1801
L1803
L1805
IC1801
L1806
L2205
L2204
L2206
C2258
IC2202
C1823
Q1417
IC2204
C1205
C1208
P1403
L1202
QPWBXC656WJN1
DUNTKC656WJ
IC1205
C1020
Q1305
IC1302
Q1304
Q1303
Q1301
Q1302
P1401
P1402
L1304
C1333
P1301
L1302
L1303
L1301
C1310
C1065
P1003
P1002
IC704
C705
C1421
JF1011
P1006
IC1202
X1201
SP1201
L1203
L1204
L1205
C1413
C1412
Q1412
IC1403
L1006
L1004
L1005
L1003
C1016
C1018
C1009
X1001
IC1001
C1427
Q1401
C1426
L1402
Q1411
C1430
Q1410
C1429
L1404
R6001
IC2205
C1353
C1357
IC2206
IC2203
C6004
L6010
IC2201
X2201
C1463
C1464
C1838
C1840
C1842
P2205
P2206
SC2201
IC2210
IC2207
C2276
P2203
P2204
IC2212
C2252
C6064
IC1002
IC1003
IC1004
IC1005
IC1006
IC1007
IC1008
IC1010
C1481
C1482
C1416
C1422
C1423
C1019
P1001
P1004
P1005
Q1002
Q1003
Q1004
Q1005
Q1010
Q1403
Q1404
IC1301
IC1401
IC1402
D1408
D1409
D1410
D1411
D1415
D1416
D1419
D1420
Q1413
L1002
C1005
C1006
C1604
C1601
C1024
C1026
C1302
C1310
C1303

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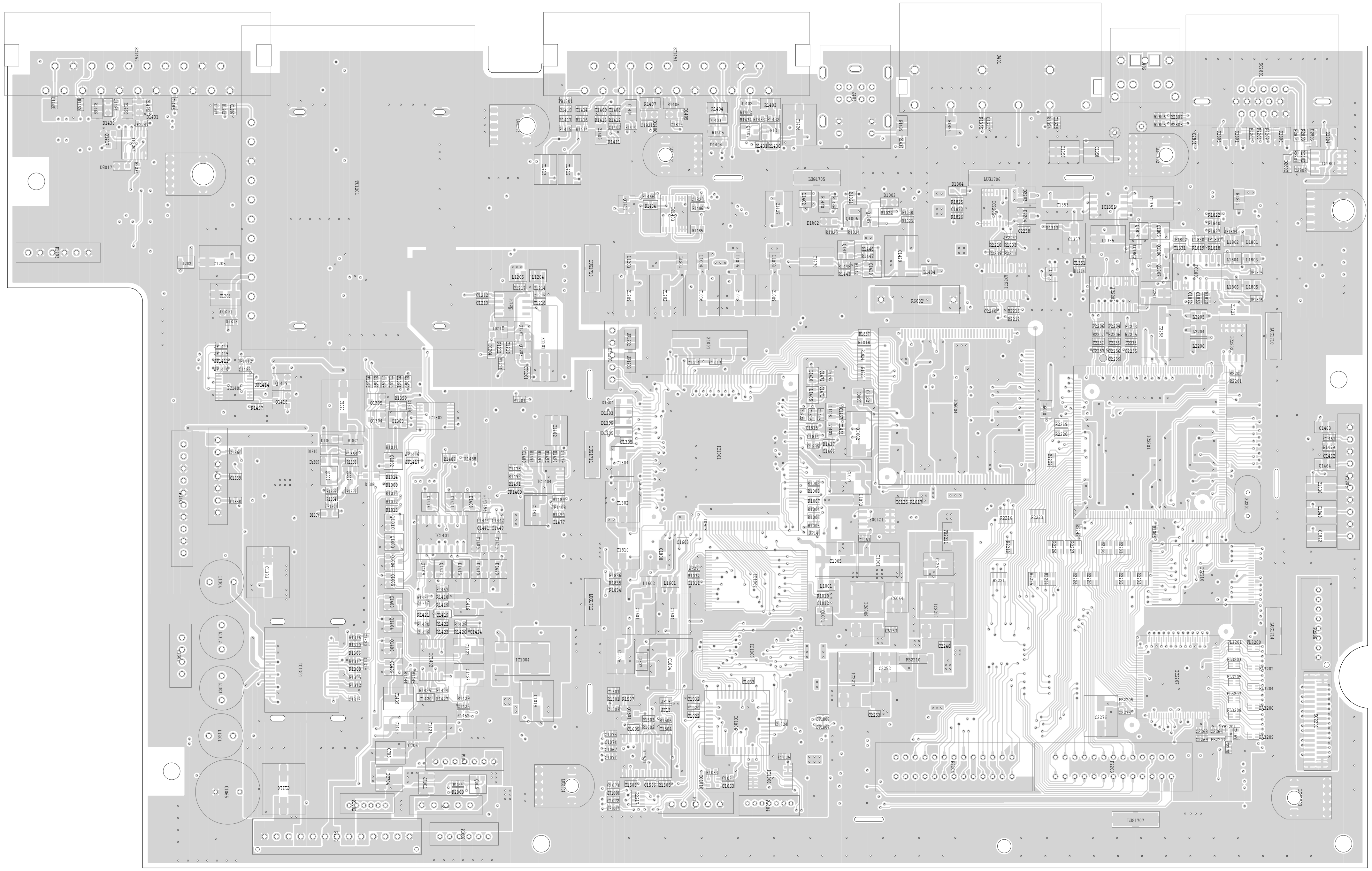
Main Unit PWB QPWBXC656WJN1 (Continued)

MAIN Unit, Side A - Chip Parts



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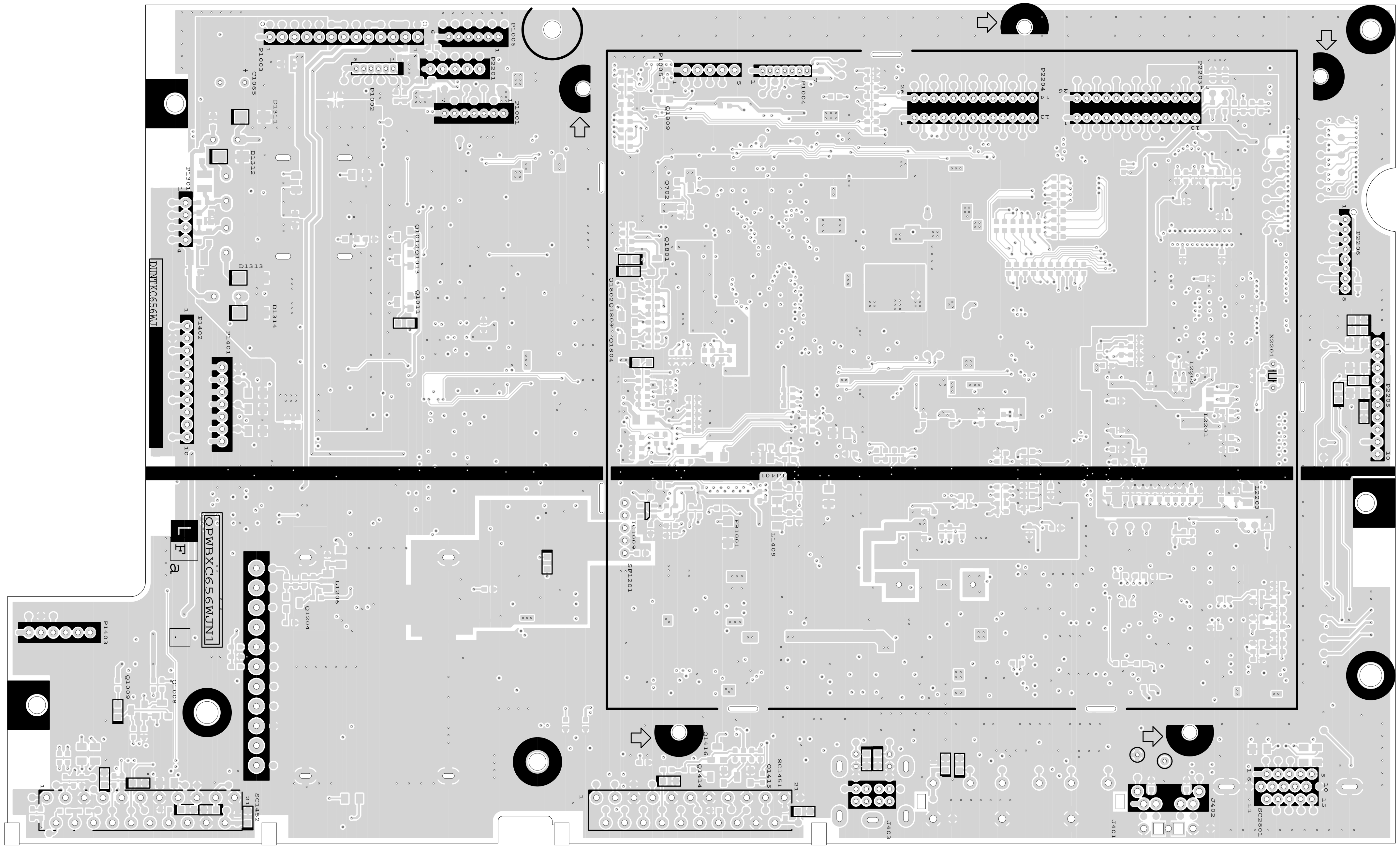
Main Unit PWB QPWBXC656WJN1 (Continued)

MAIN Unit, Side B


P1006
P2201
P1001
P1003
C1065
P1002
D1311
D1312
P1301
D1313
D1314
P1402
P1401
Q1012
Q1013
Q1011
DUNTKC656WJ
P1005
P1004
D1809
P2204
P2207
Q702
Q1801
Q1802
Q1803
Q1804
X2201
L2202
L2201
P2206
P2205
L2203
IC1409
FB1001
L1409
SP1201
L1206
Q1204
QPWBXC656WJN1
L
F
a
P1403
Q1009
SC1452
Q1416
Q1414
SC1451
Q1415
J403
J401
J402
SC2801

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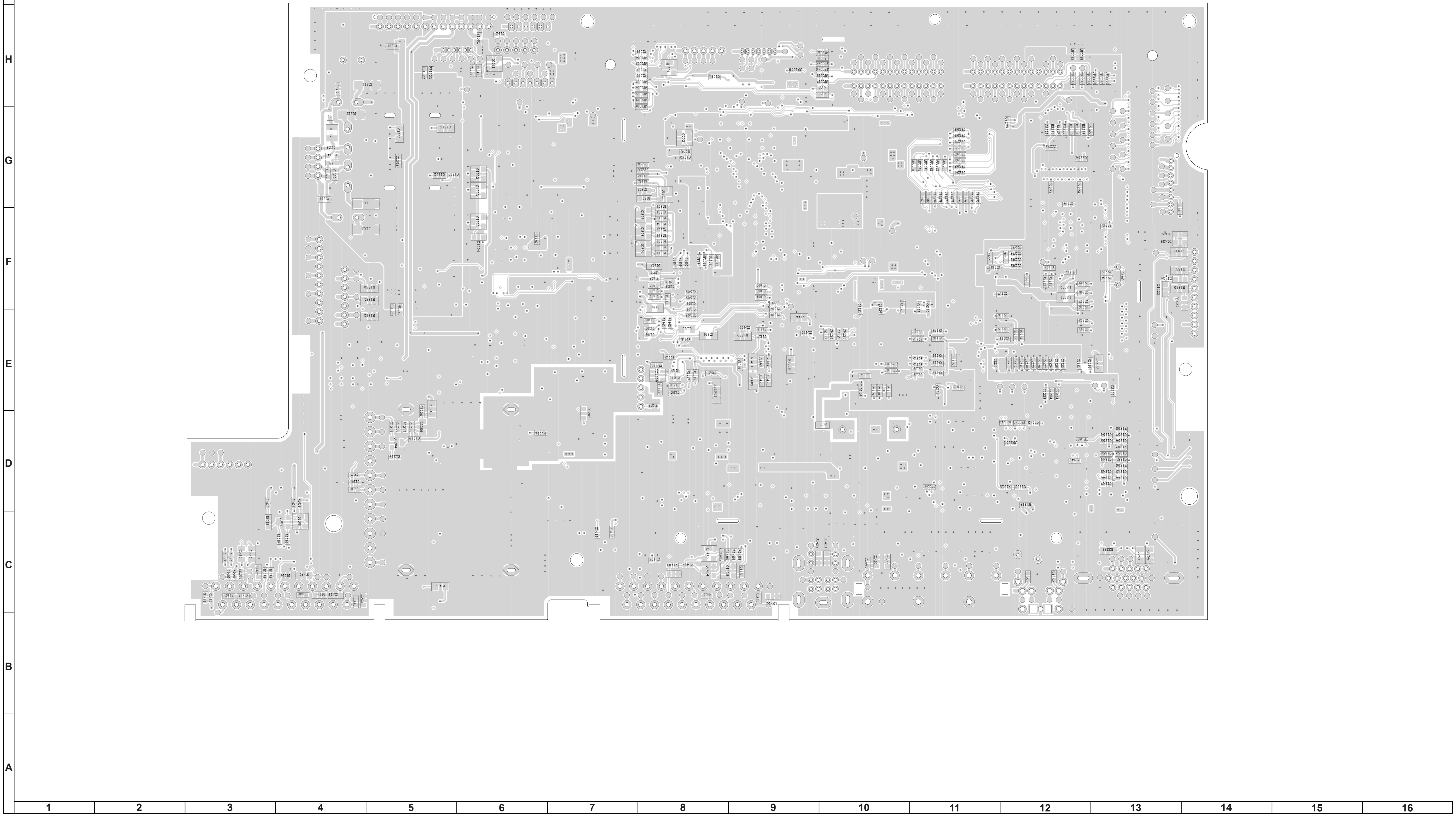
A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Main Unit PWB QPWBXC656WJN1 (Continued)

MAIN Unit, Side B - Chip Parts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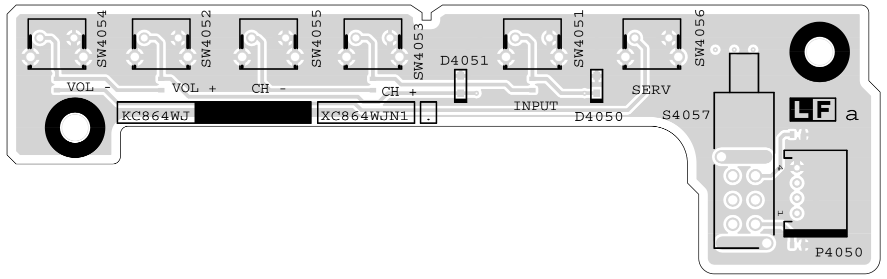
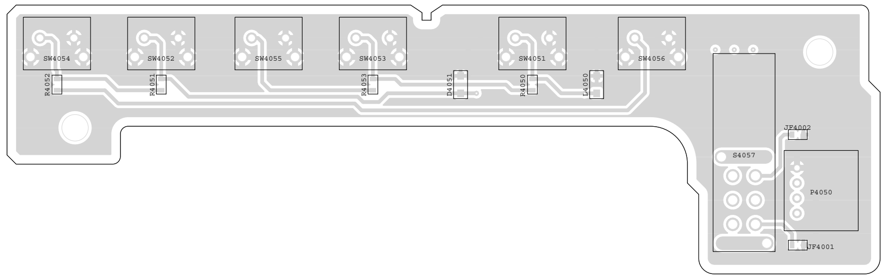
Operation Unit PWB QPWBXC864WJN1

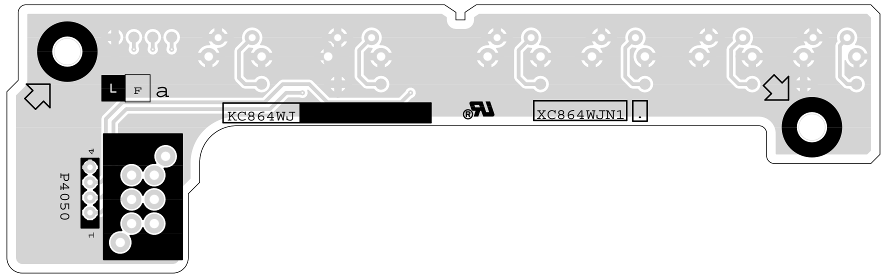
Operation Unit, Side A


SW4054
SW4052
SW4055
SW4053
SW4051
SW4056
D4051
VOL -
VOL +
CH -
CH +
SERV
INPUT
D4050
S4057
KC864WJ
XC864WJN1
P4050
L F a

Operation Unit, Side A - Chip Parts

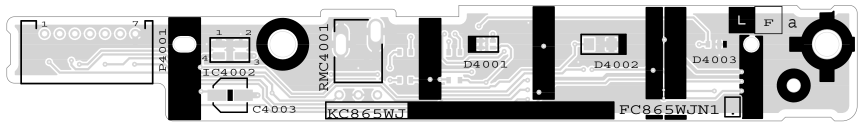

SW4054
SW4052
SW4055
SW4053
SW4051
SW4056
S4057
P4050

Operation Unit, Side B

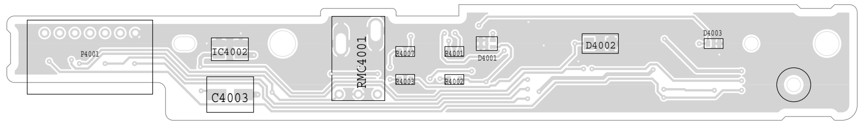

L F a
KC864WJ
XC864WJN1
P4050

RC / LED Unit PWB QPWBXC865WJN1

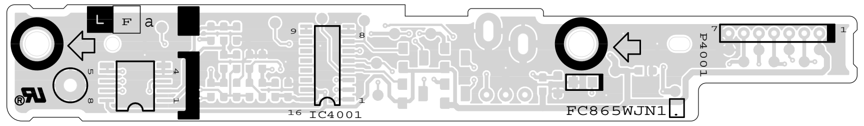
RC / LED Unit, Side A


P4001
IC4002
C4003
RMC4001
D4001
D4002
D4003
KC865WJ
FC865WJN1
L F a

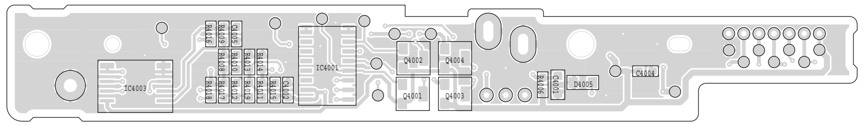
RC / LED Unit, Side A - Chip Parts


P4001
IC4002
C4003
RMC4001
D4002

RC / LED Unit, Side B

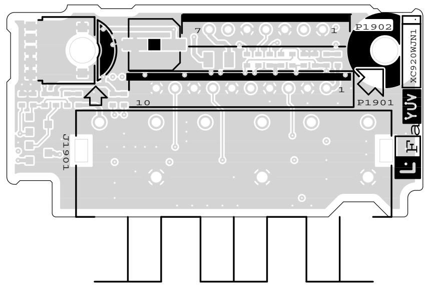

L F a
IC4001
P4001
FC865WJN1

RC / LED Unit, Side B - Chip Parts

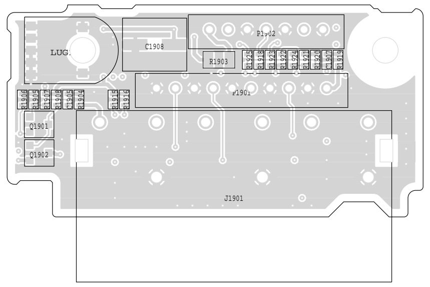


YUV Unit PWB QPWBXC920WJN1

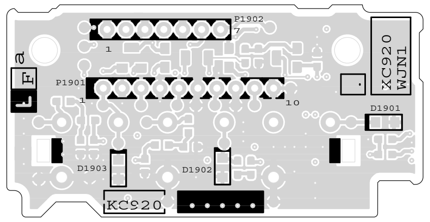
YUV Unit, Side A


P1902
P1901
J1901
XC920WJN1
YUV
L F a

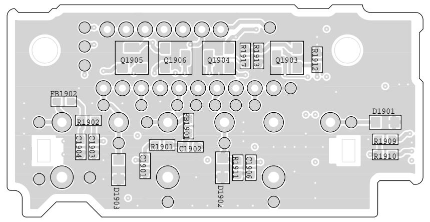
YUV Unit, Side A - Chip Parts



YUV Unit, Side B

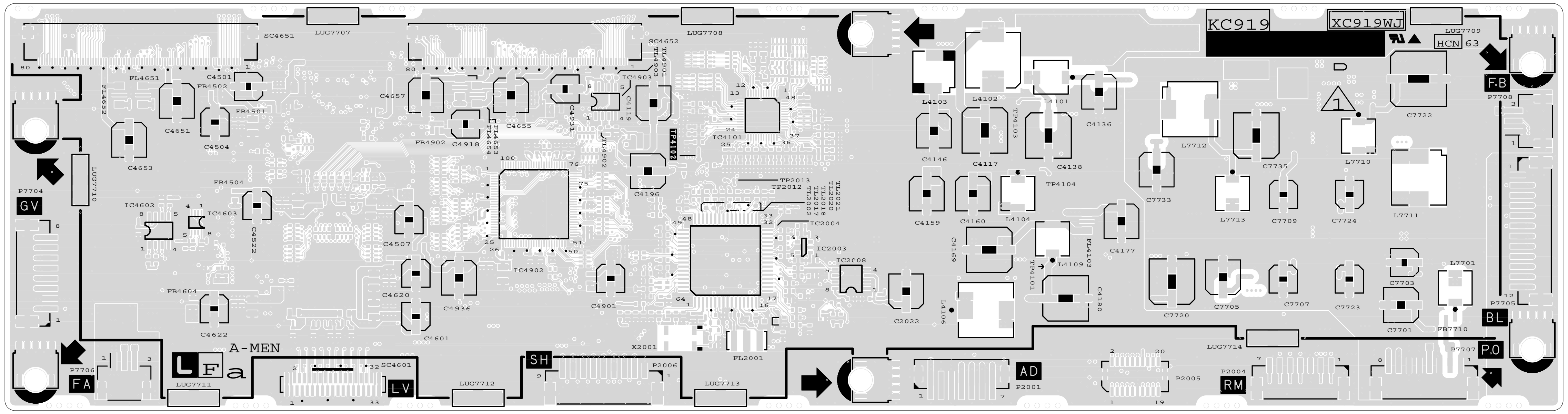

P1902
P1901
XC920WJN1
D1901
D1902
D1903
KC920
L F a

YUV Unit, Side B - Chip Parts

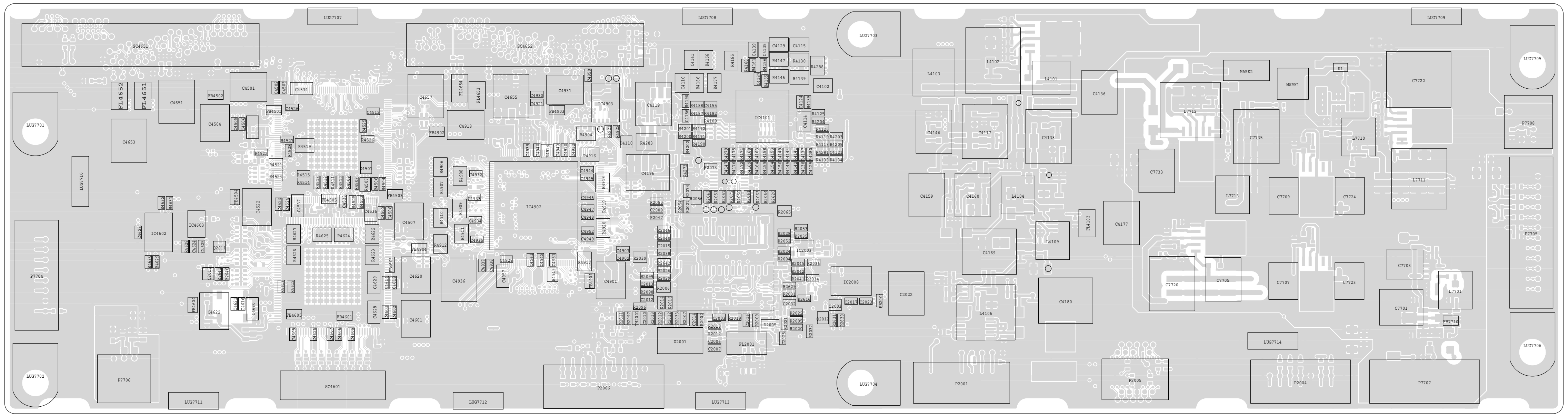


LCD Control Unit PWB QPWBXC919WJN1

LCD Control Unit, Side A

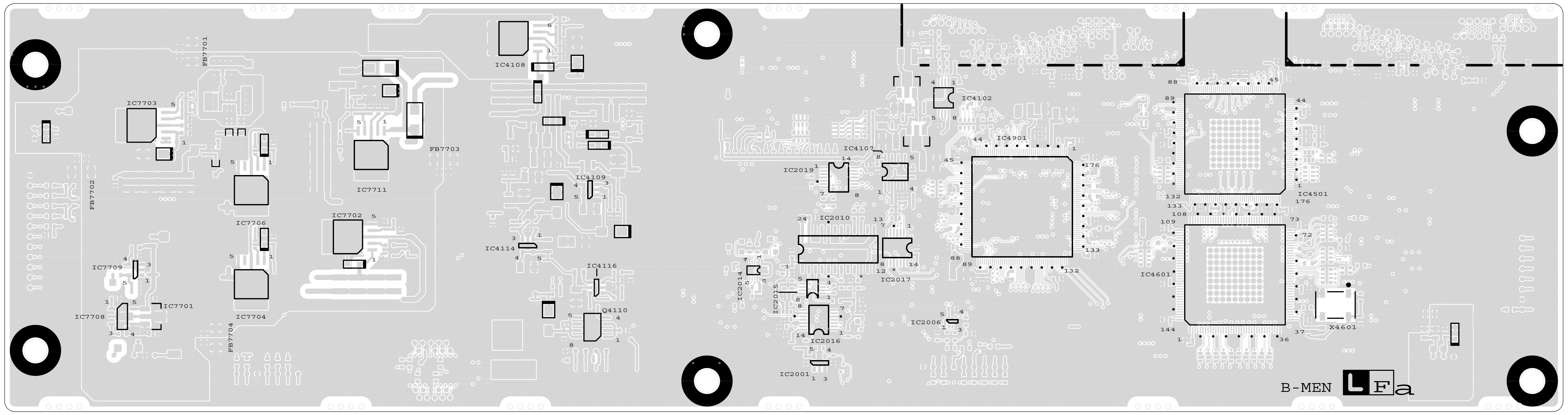

KC919
XC919WJ
HCN 63
SC4651
LUG7707
SC4652
LUG7708
LUG7709
FL4651
C4501
FB4502
FB4501
C4651
C4504
C4653
C4657
C4655
C4918
FB4902
IC4903
C4119
TP4102
C4196
IC4101
TP2013
TP2012
IC2004
IC2003
IC2008
C4507
C4620
C4936
C4601
C4622
FB4604
FB4504
IC4602
IC4603
C4522
IC4902
C4901
X2001
FL2001
C2022
L4103
L4102
L4101
C4136
TP4103
C4146
C4117
C4138
TP4104
C4159
C4160
L4104
C4169
L4106
L4109
TP4101
FL4103
C4177
C4180
L7712
C7735
L7710
C7722
C7733
L7713
C7709
C7724
L7711
C7720
C7705
C7707
C7723
C7703
C7701
L7701
FB7710
P7704
P7706
P7708
P7705
P7707
P2006
P2001
P2005
P2004
LUG7710
LUG7711
LUG7712
LUG7713
LUG7714
SC4601
A-MEN
GV
FA
LV
SH
AD
RM
F.B
BL
P.O

LCD Control Unit, Side A - Chip Parts

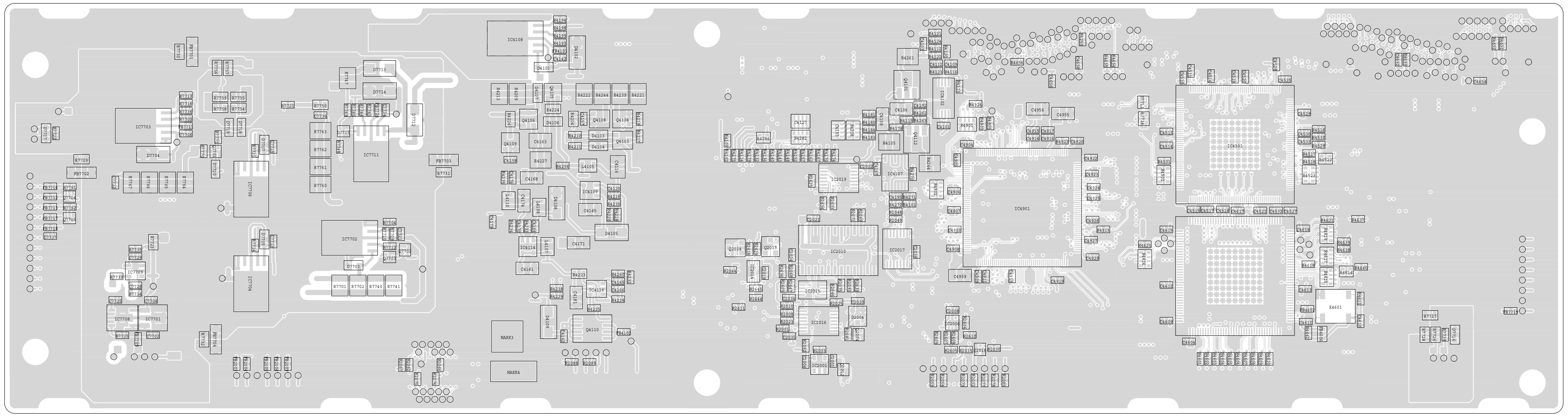


LCD Control Unit PWB QPWBXC919WJN1

LCD Control Unit, Side B


IC7703
IC7711
IC7702
IC7706
IC7704
IC7709
IC7701
IC7708
FB7701
FB7702
FB7703
FB7704
IC4108
IC4109
IC4114
IC4116
Q4110
IC4102
IC4107
IC4901
IC4501
IC4601
IC2019
IC2010
IC2017
IC2014
IC2015
IC2016
IC2006
IC2001
X4601
B-MEN

LCD Control Unit, Side B - Chip Parts



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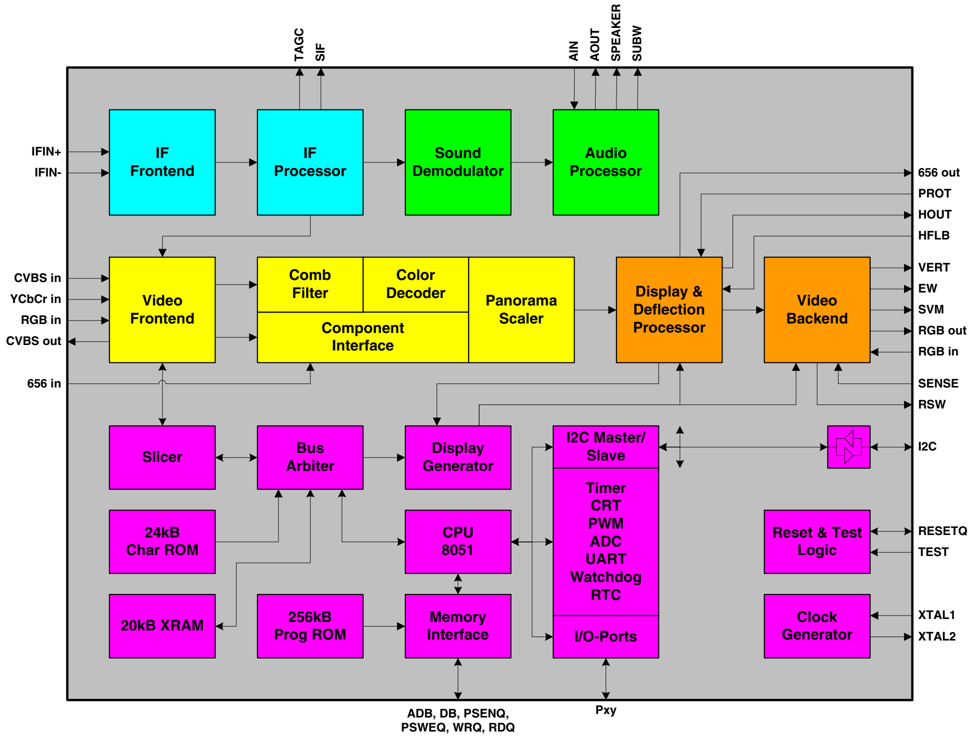
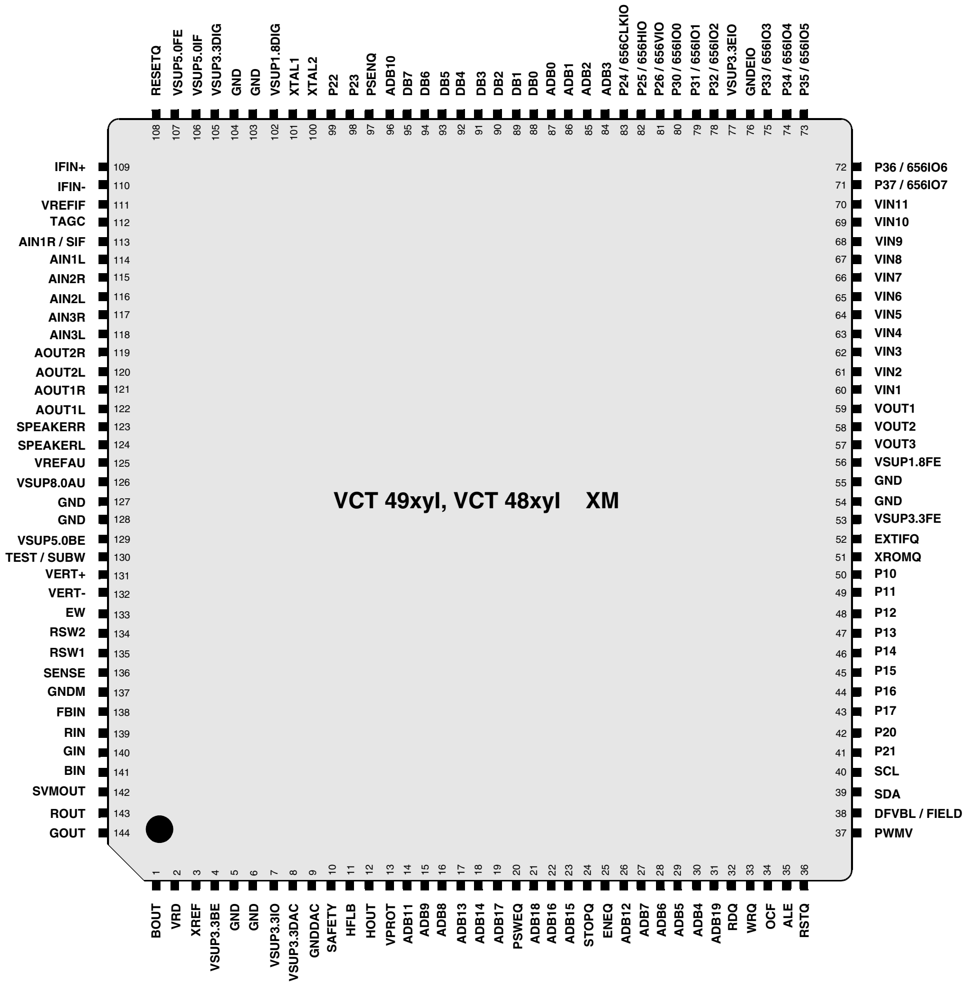
MAJOR ICs INFORMATION

1. IC1001 (RH-IXB058WJZZ)

1.1. VCT Block Diagram IC1001


TAGC
SIF
AIN
AOUT
SPEAKER
SUBW
IFIN+
IFIN-
IF Frontend
IF Processor
Sound Demodulator
Audio Processor
656 out
PROT
HOUT
HFLB
CVBS in
YCbCr in
RGB in
CVBS out
Video Frontend
Comb Filter
Color Decoder
Component Interface
Panorama Scaler
Display & Deflection Processor
Video Backend
VERT
EW
SVM
RGB out
RGB in
656 in
SENSE
RSW
Slicer
Bus Arbiter
Display Generator
I2C Master/ Slave
Timer
CRT
PWM
ADC
UART
Watchdog
RTC
I2C
24kB Char ROM
CPU 8051
Reset & Test Logic
RESETQ
TEST
20kB XRAM
256kB Prog ROM
Memory Interface
I/O-Ports
Clock Generator
XTAL1
XTAL2
ADB, DB, PSENQ, PSWEQ, WRQ, RDQ
Pxy

1.2. Pinning IC1001


VCT 49xyl, VCT 48xyl XM
108 RESETQ
107 VSUP5.0FE
106 VSUP5.0IF
105 VSUP3.3DIG
104 GND
103 GND
102 VSUP1.8DIG
101 XTAL1
100 XTAL2
99 P22
98 P23
97 PSENQ
96 ADB10
95 DB7
94 DB6
93 DB5
92 DB4
91 DB3
90 DB2
89 DB1
88 DB0
87 ADB0
86 ADB1
85 ADB2
84 ADB3
83 P24 / 656CLKIO
82 P25 / 656HIO
81 P26 / 656VIO
80 P30 / 656IO0
79 P31 / 656IO1
78 P32 / 656IO2
77 VSUP3.3EIO
76 GNDEIO
75 P33 / 656IO3
74 P34 / 656IO4
73 P35 / 656IO5
109 IFIN+
110 IFIN-
111 VREFIF
112 TAGC
113 AIN1R / SIF
114 AIN1L
115 AIN2R
116 AIN2L
117 AIN3R
118 AIN3L
119 AOUT2R
120 AOUT2L
121 AOUT1R
122 AOUT1L
123 SPEAKERR
124 SPEAKERL
125 VREFAU
126 VSUP8.0AU
127 GND
128 GND
129 VSUP5.0BE
130 TEST / SUBW
131 VERT+
132 VERT-
133 EW
134 RSW2
135 RSW1
136 SENSE
137 GNDM
138 FBIN
139 RIN
140 GIN
141 BIN
142 SVMOUT
143 ROUT
144 GOUT
72 P36 / 656IO6
71 P37 / 656IO7
70 VIN11
69 VIN10
68 VIN9
67 VIN8
66 VIN7
65 VIN6
64 VIN5
63 VIN4
62 VIN3
61 VIN2
60 VIN1
59 VOUT1
58 VOUT2
57 VOUT3
56 VSUP1.8FE
55 GND
54 GND
53 VSUP3.3FE
52 EXTIFQ
51 XROMQ
50 P10
49 P11
48 P12
47 P13
46 P14
45 P15
44 P16
43 P17
42 P20
41 P21
40 SCL
39 SDA
38 DFVBL / FIELD
37 PWMV
1 BOUT
2 VRD
3 XREF
4 VSUP3.3BE
5 GND
6 GND
7 VSUP3.3IO
8 VSUP3.3DAC
9 GNDDAC
10 SAFETY
11 HFLB
12 HOUT
13 VPROT
14 ADB11
15 ADB9
16 ADB8
17 ADB13
18 ADB14
19 ADB17
20 PSWEQ
21 ADB18
22 ADB16
23 ADB15
24 STOPQ
25 ENEQ
26 ADB12
27 ADB7
28 ADB6
29 ADB5
30 ADB4
31 ADB19
32 RDQ
33 WRQ
34 OCF
35 ALE
36 RSTQ

1.3. Description of Pins IC1001

NC = not connected
LV = if not used, leave vacant
OBL = obligatory; connect as described in circuit diagram
IN = Input Pin
OUT = Output Pin
SUPPLY = Supply Pin

Pin No.			Pin Name	Type	Connection (If not used)	Short Description
PSSDIP88-1 PY	**PSSDIP88-1 PZ**	**PMQFP144-2 XM**				
1	88	128	GND	SUPPLY	OBL	Ground Platform
2	87	129	VSUP5.0BE	SUPPLY	OBL	Supply Voltage Analog Video Back-end, 5.0 V
3	86	130	TEST / SUBW	IN OUT	GND	Test Input, reserved for Test Subwoofer Output
4	85	131	VERT+	OUT	GND	Differential Vertical Sawtooth Output
5	84	132	VERT-	OUT	GND	Differential Vertical Sawtooth Output
6	83	133	EW	OUT	GND	Vertical Parabola Output
7	82	134	RSW2	OUT	LV	Range Switch 2 Output
8	81	135	RSW1	OUT	LV	Range Switch 1 Output
9	80	136	SENSE	IN	GND	Sense ADC Input
10	79	137	GNDM	IN	GND	Reference Ground for Sense ADC
11	78	138	FBIN	IN	GND	Fast Blank Input, Back-end
12	77	139	RIN	IN	GND	Analog Red Input, Back-end
13	76	140	GIN	IN	GND	Analog Green Input, Back-end
14	75	141	BIN	IN	GND	Analog Blue Input, Back-end
15	74	142	SVMOUT	OUT	VSUP5.0BE	Scan Velocity Modulation Output
16	73	143	ROUT	OUT	VSUP5.0BE	Analog Red Output
17	72	144	GOUT	OUT	VSUP5.0BE	Analog Green Output
18	71	1	BOUT	OUT	VSUP5.0BE	Analog Blue Output
19	70	2	VRD		OBL	Reference Voltage for RGB DACs
20	69	3	XREF		OBL	Reference Current for RGB DACs
21	68	4	VSUP3.3BE	SUPPLY	OBL	Supply Voltage Analog Video Back-end, 3.3 V
22	67	5	GND	SUPPLY	OBL	Ground Platform
23	66	6	GND	SUPPLY	OBL	Ground Platform
24	65	7	VSUP3.3IO	SUPPLY	OBL	Supply Voltage I/O Ports, 3.3 V
25	64	8	VSUP3.3DAC	SUPPLY	OBL	Supply Voltage Video DACs, 3.3 V
26	63	9	GNDDAC	SUPPLY	OBL	Ground Video DACs
27	62	10	SAFETY	IN	GND	Safety Input

1.3. Description of Pins IC1001, continued

Pin No.			Pin Name	Type	Connection (If not used)	Short Description
PSSDIP88-1 PY	PSSDIP88-1 PZ	PMQFP144-2 XM				
28	61	11	HFLB	IN	HOUT	Horizontal Flyback Input
29	60	12	HOUT	OUT	LV	Horizontal Drive Output
30	59	13	VPROT	IN	GND	Vertical Protection Input
–	–	37	PWMV	OUT	LV	PWM Vertical Output
–	–	38	DFVBL	OUT	LV	Dynamic Focus Vertical Blanking Output
31	58	39	SDA	IN/OUT	OBL	I^2C Bus Data Input/Output
32	57	40	SCL	IN/OUT	OBL	I^2C Bus Clock Input/Output
33	56	41	P21	IN/OUT	LV	Port 2, Bit 1 Input/Output
34	55	42	P20	IN/OUT	LV	Port 2, Bit 0 Input/Output
35	54	43	P17	IN/OUT	LV	Port 1, Bit 7 Input/Output
36	53	44	P16	IN/OUT	LV	Port 1, Bit 6 Input/Output
37	52	45	P15	IN/OUT	LV	Port 1, Bit 5 Input/Output
38	51	46	P14	IN/OUT	LV	Port 1, Bit 4 Input/Output
39	50	47	P13	IN/OUT	LV	Port 1, Bit 3 Input/Output
40	49	48	P12	IN/OUT	LV	Port 1, Bit 2 Input/Output
41	48	49	P11	IN/OUT	LV	Port 1, Bit 1 Input/Output
42	47	50	P10	IN/OUT	LV	Port 1, Bit 0 Input/Output
43	46	53	VSUP3.3FE	SUPPLY	OBL	Supply Voltage Analog Video Front-end, 3.3 V
44	45	54	GND	SUPPLY	OBL	Ground Platform
45	44	55	GND	SUPPLY	OBL	Ground Platform
46	43	56	VSUP1.8FE	SUPPLY	OBL	Supply Voltage Analog Video Front-end, 1.8 V
47	42	57	VOUT3	OUT	LV	Analog Video 3 Output
48	41	58	VOUT2	OUT	LV	Analog Video 2 Output
49	40	59	VOUT1	OUT	LV	Analog Video 1 Output
50	39	60	VIN1	IN	GND	Analog Video 1 Input
51	38	61	VIN2	IN	GND	Analog Video 2 Input
52	37	62	VIN3	IN	GND	Analog Video 3 Input
53	36	63	VIN4	IN	GND	Analog Video 4 Input
54	35	64	VIN5	IN	GND	Analog Video 5 Input
55	34	65	VIN6	IN	GND	Analog Video 6 Input
56	33	66	VIN7	IN	GND	Analog Video 7 Input
57	32	67	VIN8	IN	GND	Analog Video 8 Input
58	31	68	VIN9	IN	GND	Analog Video 9 Input

1.3. Description of Pins IC1001, continued

Pin No.			Pin Name	Type	Connection (If not used)	Short Description
PSSDIP88-1 PY	PSSDIP88-1 PZ	PMQFP144-2 XM				
59	30	69	VIN10	IN	GND	Analog Video 10 Input
60	29	70	VIN11	IN	GND	Analog Video 11 Input
61	28	98	P23	IN/OUT	LV	Port 2, Bit 3 Input/Output
62	27	99	P22	IN/OUT	LV	Port 2, Bit 2 Input/Output
63	26	100	XTAL2	OUT	OBL	Analog Crystal Output
64	25	101	XTAL1	IN	OBL	Analog Crystal Input
65	24	102	VSUP1.8DIG	SUPPLY	OBL	Supply Voltage Digital Core, 1.8 V
66	23	103	GND	SUPPLY	OBL	Ground Platform
67	22	104	GND	SUPPLY	OBL	Ground Platform
68	21	105	VSUP3.3DIG	SUPPLY	OBL	Supply Voltage Digital Core, 3.3 V
69	20	106	VSUP5.0IF	SUPPLY	OBL	Supply Voltage IF ADC, 5.0 V
70	19	107	VSUP5.0FE	SUPPLY	OBL	Supply Voltage Analog IF Front-end, 5.0 V
71	18	108	RESETQ	IN/OUT	OBL	$\overline{\text{Reset}}$ Input/Output
72	17	109	IFIN+	IN	VREF$_{IF}$	Differential IF Input
73	16	110	IFIN-	IN	VREF$_{IF}$	Differential IF Input
74	15	111	VREFIF		OBL	Reference Voltage, IF ADC
75	14	112	TAGC	OUT	LV	Tuner AGC Output
76	13	113	AIN1R / SIF	IN/OUT	GND	Analog Audio 1 Input, Right Analog 2nd Sound IF Output
77	12	114	AIN1L	IN	GND	Analog Audio 1 Input, Left
78	11	115	AIN2R	IN	GND	Analog Audio 2 Input, Right
79	10	116	AIN2L	IN	GND	Analog Audio 2 Input, Left
–	–	117	AIN3R	IN	GND	Analog Audio 3 Input, Right
–	–	118	AIN3L	IN	GND	Analog Audio 3 Input, Left
–	–	119	AOUT2R	OUT	LV	Analog Audio 2 Output, Right
–	–	120	AOUT2L	OUT	LV	Analog Audio 2 Output, Left
80	9	–	AIN3R / AOUT2R	IN / OUT	LV	Analog Audio 3 Input, Right Analog Audio 2 Output, Right
81	8	–	AIN3L / AOUT2L	IN / OUT	LV	Analog Audio 3 Input, Left Analog Audio 2 Output, Left
82	7	121	AOUT1R	OUT	LV	Analog Audio 1 Output, Right
83	6	122	AOUT1L	OUT	LV	Analog Audio 1 Output, Left
84	5	123	SPEAKERR	OUT	LV	Analog Loudspeaker Output, Right
85	4	124	SPEAKERL	OUT	LV	Analog Loudspeaker Output, Left

1.3. Description of Pins IC1001, continued

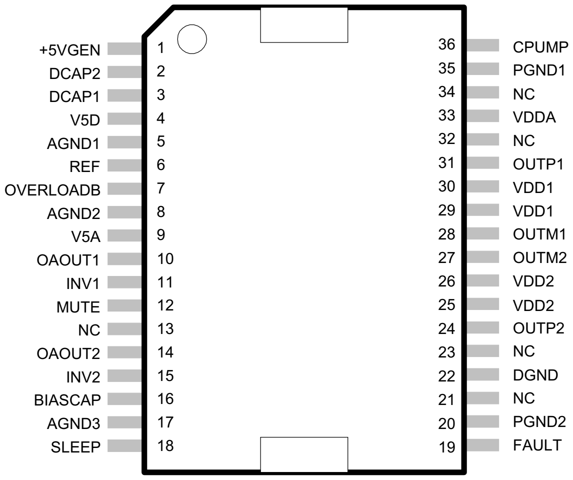
Pin No. PSSDIP88-1 PY	Pin No. PSSDIP88-1 PZ	Pin No. PMQFP144-2 XM	Pin Name	Type	Connection (If not used)	Short Description
86	3	125	VREFAU		OBL	Reference Voltage, Audio
87	2	126	VSUP8.0AU	SUPPLY	OBL	Supply Voltage Analog Audio, 8.0 V
88	1	127	GND	SUPPLY	OBL	Ground Platform
–	–	71	P37 / 656IO7	IN/OUT	LV	Port 3, Bit 7 Input/Output Digital 656 Bus 7 Input/Output
–	–	72	P36 / 656IO6	IN/OUT	LV	Port 3, Bit 6 Input/Output Digital 656 Bus 6 Input/Output
–	–	73	P35 / 656IO5	IN/OUT	LV	Port 3, Bit 5 Input/Output Digital 656 Bus 5 Input/Output
–	–	74	P34 / 656IO4	IN/OUT	LV	Port 3, Bit 4 Input/Output Digital 656 Bus 4 Input/Output
–	–	75	P33 / 656IO3	IN/OUT	LV	Port 3, Bit 3 Input/Output Digital 656 Bus 3 Input/Output
–	–	76	GNDEIO	SUPPLY	OBL	Ground Extended I/O Ports
–	–	77	VSUP3.3EIO	SUPPLY	OBL	Supply Voltage Extended I/O Ports, 3.3 V
–	–	78	P32 / 656IO2	IN/OUT	LV	Port 3, Bit 2 Input/Output Digital 656 Bus 2 Input/Output
–	–	79	P31 / 656IO1	IN/OUT	LV	Port 3, Bit 1 Input/Output Digital 656 Bus 1 Input/Output
–	–	80	P30 / 656IO0	IN/OUT	LV	Port 3, Bit 0 Input/Output Digital 656 Bus 0 Input/Output
–	–	81	P26 / 656VIO	IN/OUT	LV	Port 2, Bit 6 Input/Output Digital 656 Vsync Input/Output
–	–	82	P25 / 656HIO	IN/OUT	LV	Port 2, Bit 5 Input/Output Digital 656 Hsync Input/Output
–	–	83	P24 / 656CLKIO	IN/OUT	LV	Port 2, Bit 4 Input/Output Digital 656 Clock Input/Output
–	–	31	ADB19	OUT	LV	Address Bus 19 Output
–	–	21	ADB18	OUT	LV	Address Bus 18 Output
–	–	19	ADB17	OUT	LV	Address Bus 17 Output
–	–	22	ADB16	OUT	LV	Address Bus 16 Output
–	–	23	ADB15	OUT	LV	Address Bus 15 Output
–	–	18	ADB14	OUT	LV	Address Bus 14 Output
–	–	17	ADB13	OUT	LV	Address Bus 13 Output
–	–	26	ADB12	OUT	LV	Address Bus 12 Output
–	–	14	ADB11	OUT	LV	Address Bus 11 Output
–	–	96	ADB10	OUT	LV	Address Bus 10 Output

1.3. Description of Pins IC1001, continued

Pin No.			Pin Name	Type	Connection (If not used)	Short Description
PSSDIP88-1 PY	PSSDIP88-1 PZ	PMQFP144-2 XM				
–	–	15	ADB9	OUT	LV	Address Bus 9 Output
–	–	16	ADB8	OUT	LV	Address Bus 8 Output
–	–	27	ADB7	OUT	LV	Address Bus 7 Output
–	–	28	ADB6	OUT	LV	Address Bus 6 Output
–	–	29	ADB5	OUT	LV	Address Bus 5 Output
–	–	30	ADB4	OUT	LV	Address Bus 4 Output
–	–	84	ADB3	OUT	LV	Address Bus 3 Output
–	–	85	ADB2	OUT	LV	Address Bus 2 Output
–	–	86	ADB1	OUT	LV	Address Bus 1 Output
–	–	87	ADB0	OUT	LV	Address Bus 0 Output
–	–	88	DB0	IN/OUT	LV	Data Bus 0 Input/Output
–	–	89	DB1	IN/OUT	LV	Data Bus 1 Input/Output
–	–	90	DB2	IN/OUT	LV	Data Bus 2 Input/Output
–	–	91	DB3	IN/OUT	LV	Data Bus 3 Input/Output
–	–	92	DB4	IN/OUT	LV	Data Bus 4 Input/Output
–	–	93	DB5	IN/OUT	LV	Data Bus 5 Input/Output
–	–	94	DB6	IN/OUT	LV	Data Bus 6 Input/Output
–	–	95	DB7	IN/OUT	LV	Data Bus 7 Input/Output
–	–	32	RDQ	OUT	LV	Data Read Enable Output
–	–	33	WRQ	OUT	LV	Data Write Enable Output
–	–	34	OCF	OUT	LV	Opcode Fetch Output
–	–	35	ALE	OUT	LV	Address Latch Enable Output
–	–	36	RSTQ	OUT	LV	Internal CPU Reset Output
–	–	97	PSENQ	OUT	LV	Program Store Enable Output
–	–	20	PSWEQ	OUT	LV	Program Store Write Enable Output
–	–	51	XROMQ	IN	OBL	External ROM Enable Input
–	–	52	EXTIFQ	IN	LV	Enable External Interface Input
–	–	24	STOPQ	IN	LV	Stop CPU Input
–	–	25	ENEQ	IN	LV	Enable Emulation Input

2. IC1301 (VHITA2024++-1)

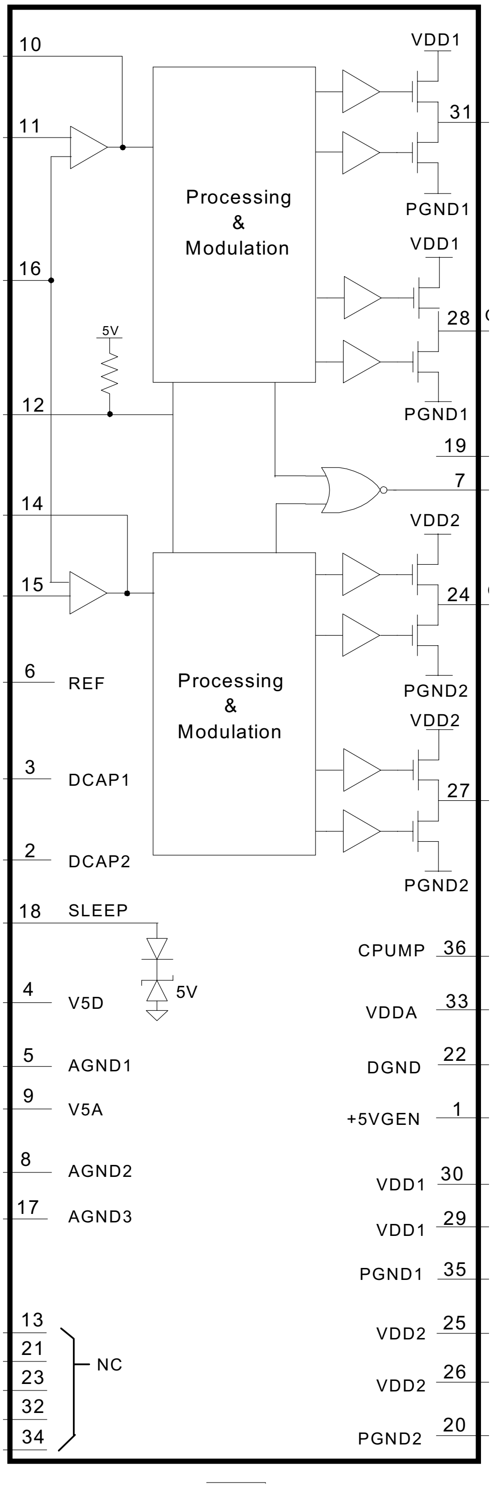
2.1. Pinning IC1301


+5VGEN 1
DCAP2 2
DCAP1 3
V5D 4
AGND1 5
REF 6
OVERLOADB 7
AGND2 8
V5A 9
OAOUT1 10
INV1 11
MUTE 12
NC 13
OAOUT2 14
INV2 15
BIASCAP 16
AGND3 17
SLEEP 18
36 CPUMP
35 PGND1
34 NC
33 VDDA
32 NC
31 OUTP1
30 VDD1
29 VDD1
28 OUTM1
27 OUTM2
26 VDD2
25 VDD2
24 OUTP2
23 NC
22 DGND
21 NC
20 PGND2
19 FAULT

2.2. Pin Description IC1301

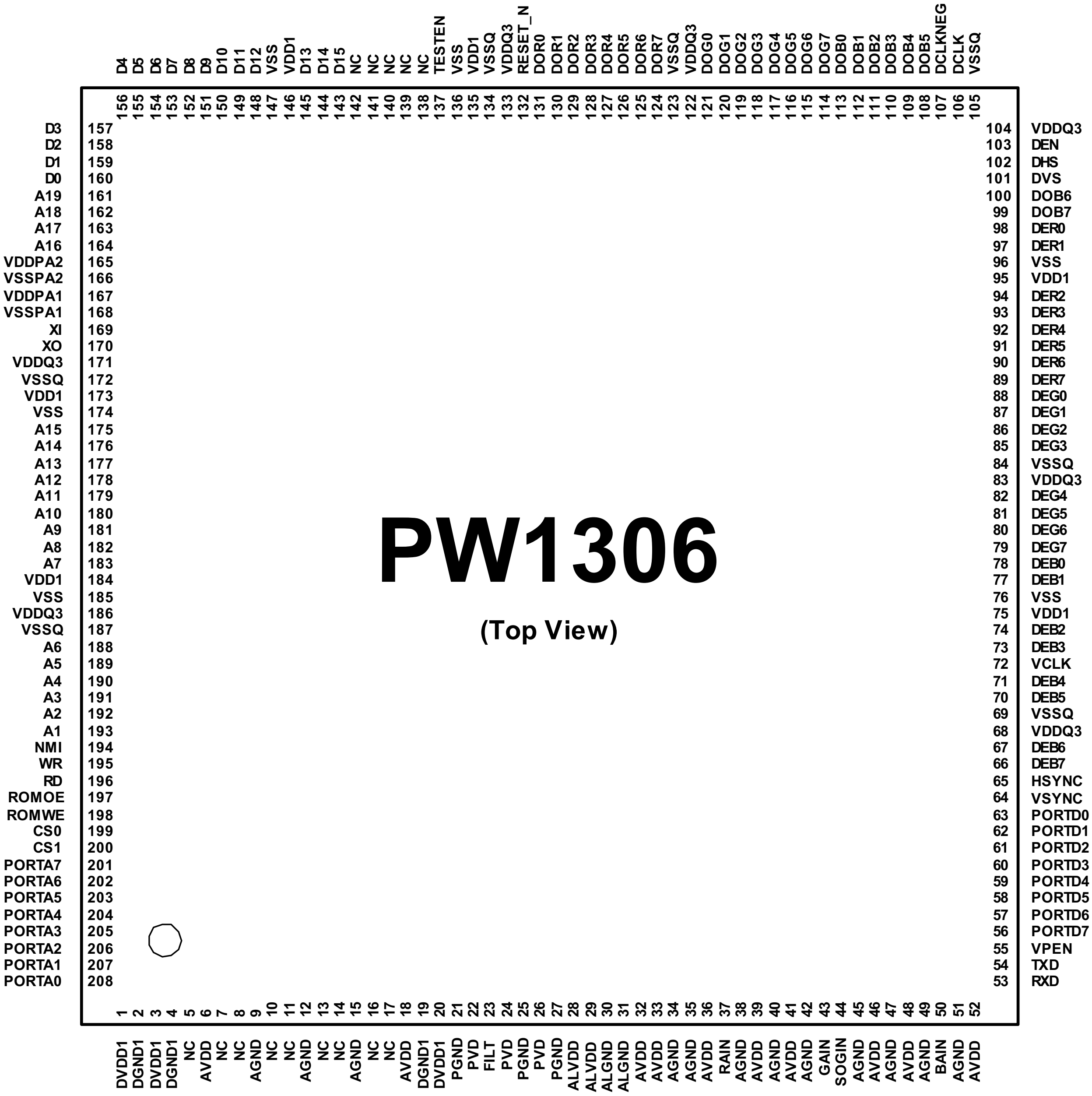
Pin	Function	Description
2, 3	DCAP2, DCAP1	Charge pump switching pins. DCAP1 (pin 3) is a free running 300kHz square wave between VDDA and DGND (12Vpp nominal). DCAP2 (pin 2) is level shifted 10 volts above DCAP1 (pin 3) with the same amplitude (12Vpp nominal), frequency, and phase as DCAP1.
4, 9	V5D, V5A	Digital 5VDC, Analog 5VDC
5, 8, 17	AGND1, AGND2, AGND3	Analog Ground
6	REF	Internal reference voltage; approximately 1.0 VDC.
7	OVERLOADB	A logic low output indicates the input signal has overloaded the amplifier.
10, 14	OAOUT1, OAOUT2	Input stage output pins.
11, 15	INV1, INV2	Single-ended inputs. Inputs are a “virtual” ground of an inverting opamp with approximately 2.4VDC bias.
12	MUTE	When set to logic high, both amplifiers are muted and in idle mode. When low (grounded), both amplifiers are fully operational. If left floating, the device stays in the mute mode. This pin should be tied to GND if not used.
16	BIASCAP	Input stage bias voltage (approximately 2.4VDC).
18	SLEEP	When set to logic high, device goes into low power mode. If not used, this pin should be grounded
19	FAULT	A logic high output indicates thermal overload, or an output is shorted to ground, or another output.
20, 35	PGND2, PGND1	Power Grounds (high current)
22	DGND	Digital Ground. Connect to AGND locally (near the TA2024).
24, 27; 31, 28	OUTP2 & OUTM2; OUTP1 & OUTM1	Bridged output pairs
25, 26, 29, 30	VDD2, VDD2 VDD1, VDD1	Supply pins for high current H-bridges, nominally 12VDC.
13, 21, 23, 32, 34	NC	Not connected. Not bonded internally.
33	VDDA	Analog 12VDC
36	CPUMP	Charge pump output (nominally 10V above VDDA)
1	5VGEN	Regulated 5VDC source used to supply power to the input section (pins 4 and 9).

2.3. Block Diagram IC1301

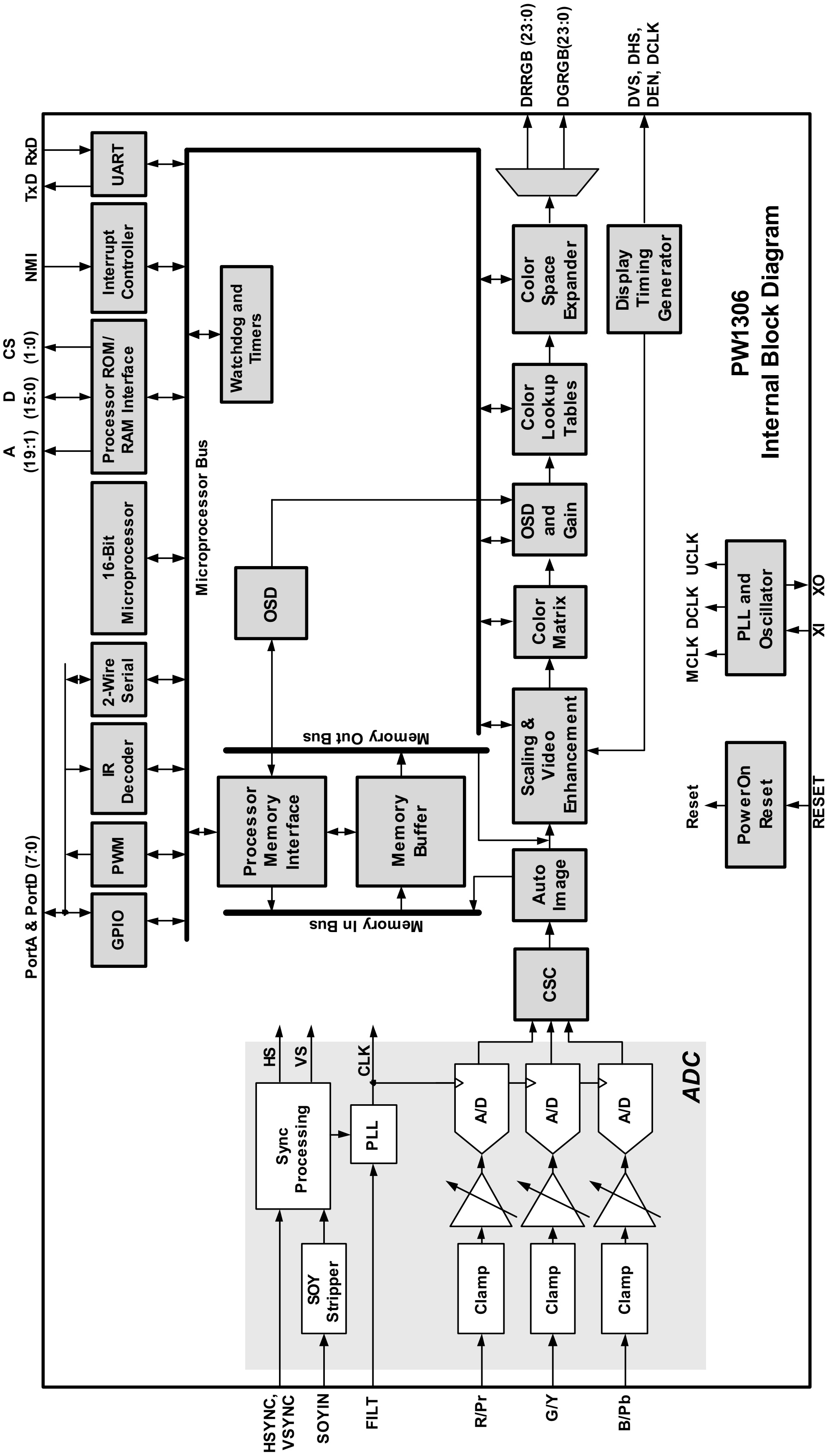

10
11
16
12
14
15
5V
Processing
&
Modulation
Processing
&
Modulation
VDD1
31
PGND1
VDD1
28
PGND1
19
7
VDD2
24
PGND2
VDD2
27
PGND2
6 REF
3 DCAP1
2 DCAP2
18 SLEEP
5V
4 V5D
5 AGND1
9 V5A
8 AGND2
17 AGND3
13
21
23
32
34
NC
CPUMP 36
VDDA 33
DGND 22
+5VGEN 1
VDD1 30
VDD1 29
PGND1 35
VDD2 25
VDD2 26
PGND2 20

3. IC2201 (RH-IXB372WJZZ)

3.1. Pinning IC2201


PW1306
(Top View)
156 D4
155 D5
154 D6
153 D7
152 D8
151 D9
150 D10
149 D11
148 D12
147 VSS
146 VDD1
145 D13
144 D14
143 D15
142 NC
141 NC
140 NC
139 NC
138 NC
137 TESTEN
136 VSS
135 VDD1
134 VSSQ
133 VDDQ3
132 RESET_N
131 DOR0
130 DOR1
129 DOR2
128 DOR3
127 DOR4
126 DOR5
125 DOR6
124 DOR7
123 VSSQ
122 VDDQ3
121 DOG0
120 DOG1
119 DOG2
118 DOG3
117 DOG4
116 DOG5
115 DOG6
114 DOG7
113 DOB0
112 DOB1
111 DOB2
110 DOB3
109 DOB4
108 DOB5
107 DCLKNEG
106 DCLK
105 VSSQ
D3 157
D2 158
D1 159
D0 160
A19 161
A18 162
A17 163
A16 164
VDDPA2 165
VSSPA2 166
VDDPA1 167
VSSPA1 168
XI 169
XO 170
VDDQ3 171
VSSQ 172
VDD1 173
VSS 174
A15 175
A14 176
A13 177
A12 178
A11 179
A10 180
A9 181
A8 182
A7 183
VDD1 184
VSS 185
VDDQ3 186
VSSQ 187
A6 188
A5 189
A4 190
A3 191
A2 192
A1 193
NMI 194
WR 195
RD 196
ROMOE 197
ROMWE 198
CS0 199
CS1 200
PORTA7 201
PORTA6 202
PORTA5 203
PORTA4 204
PORTA3 205
PORTA2 206
PORTA1 207
PORTA0 208
104 VDDQ3
103 DEN
102 DHS
101 DVS
100 DOB6
99 DOB7
98 DER0
97 DER1
96 VSS
95 VDD1
94 DER2
93 DER3
92 DER4
91 DER5
90 DER6
89 DER7
88 DEG0
87 DEG1
86 DEG2
85 DEG3
84 VSSQ
83 VDDQ3
82 DEG4
81 DEG5
80 DEG6
79 DEG7
78 DEB0
77 DEB1
76 VSS
75 VDD1
74 DEB2
73 DEB3
72 VCLK
71 DEB4
70 DEB5
69 VSSQ
68 VDDQ3
67 DEB6
66 DEB7
65 HSYNC
64 VSYNC
63 PORTD0
62 PORTD1
61 PORTD2
60 PORTD3
59 PORTD4
58 PORTD5
57 PORTD6
56 PORTD7
55 VPEN
54 TXD
53 RXD
1 DVDD1
2 DGND1
3 DVDD1
4 DGND1
5 NC
6 AVDD
7 NC
8 NC
9 AGND
10 NC
11 NC
12 AGND
13 NC
14 NC
15 AGND
16 NC
17 NC
18 AVDD
19 DGND1
20 DVDD1
21 PGND
22 PVD
23 FILT
24 PVD
25 PGND
26 PVD
27 PGND
28 ALVDD
29 ALVDD
30 ALGND
31 ALGND
32 AVDD
33 AVDD
34 AGND
35 AGND
36 AVDD
37 RAIN
38 AGND
39 AVDD
40 AGND
41 AVDD
42 AGND
43 GAIN
44 SOGIN
45 AGND
46 AVDD
47 AGND
48 AVDD
49 AGND
50 BAIN
51 AGND
52 AVDD

3.2. Video Image Processor Block Diagram, IC2201


PW1306
Internal Block Diagram
TxD RxD
NMI
A (19:1)
D (15:0)
CS (1:0)
PortA & PortD (7:0)
UART
Interrupt Controller
Processor ROM/ RAM Interface
16-Bit Microprocessor
2-Wire Serial
IR Decoder
PWM
GPIO
Microprocessor Bus
Watchdog and Timers
OSD
Memory Out Bus
Memory In Bus
Processor Memory Interface
Memory Buffer
Color Space Expander
Color Lookup Tables
OSD and Gain
Color Matrix
Scaling & Video Enhancement
Auto Image
CSC
Display Timing Generator
DRRGB (23:0)
DGRGB(23:0)
DVS, DHS, DEN, DCLK
MCLK DCLK UCLK
PLL and Oscillator
XI
XO
Reset
PowerOn Reset
RESET
ADC
HS
VS
CLK
Sync Processing
PLL
SOY Stripper
A/D
A/D
A/D
Clamp
Clamp
Clamp
HSYNC, VSYNC
SOYIN
FILT
R/Pr
G/Y
B/Pb

3.3. Description of Pins IC2201

Signal Descriptions for the Analog Interface Pins

Name	Pin	Type	Function
RAIN	37	AI	Red/Green/Blue Analog Inputs. These pins receive the Red, Green and Blue, or YPbPr/YCbCr/YUV analog signals from the analog video source. For proper operation of the clamp feature, these inputs must be AC-coupled.
GAIN	43	AI	
BAIN	50	AI	
SOGIN	44	AI	Analog Sync-On-Green or Sync-On-Luma input. Allows recovery of the HSYNC signal when this pin is AC-coupling to the Green (Red or Blue) analog signal source. If not used, this pin should be left unconnected.
FILT	23	AI	External PLL Loop Filter. When using the on-chip PLL, this pin must be connected to an external filter network.
HSYNC	65	DIS	Horizontal Synchronization Input. This digital input signal controls the horizontal scan frequency by synchronizing the start of the horizontal scan. The logic polarity of this signal is controlled by the HSPOL bit.
VSYNC	64	DIS	Vertical Synchronization Input. This digital signal controls the vertical scan frequency.

Display/Even Port Pin Descriptions

Name	Pin(s)	Type	Function
DCLK	106	OSR	DPort Pixel Clock. Output clock for the display port pixel data. DCLK is enabled by the DCLKEN bit and can be inverted by the DCPOL bit. DCLK can be set to run at ½ pixel rate, for dual pixel output mode, by setting the DCK2EN bit. The internal DCLK clock domain can be disabled by the DCLKOFF bit to reduce power consumption.
DCLKNEG	107	OSR	DPort Pixel Clock.
DVS	101	OS	DPort Vertical Sync. DVS can be either active-high or active-low depending on the VSPOL bit. Width and timing is controlled by the VPLSE and VDLY registers.
DHS	102	OS	DPort Vertical Sync. DHS can be either active-high or active-low depending on the HSPOL bit. Sync width can be controlled by the HPLSE register.
DEN	103	OS	DPort Pixel Enable. This signal is active whenever valid data is present. The polarity is specified by the DENPOL bit.

3.3. Description of Pins IC2201, continued

Display/Even Port Pin Descriptions (continued)

Name	Pin(s)	Type	Function
DER0	98	OSR	DEPort Red Pixel Data. In dual pixel output mode these pins are the EVEN red outputs.
DER1	97	OSR	
DER2	94	OSR	
DER3	93	OSR	
DER4	92	OSR	
DER5	91	OSR	
DER6	90	OSR	
DER7	89	OSR	
DEG0	88	OSR	DEPort Green Pixel Data. In dual pixel output mode these pins are the EVEN green outputs.
DEG1	87	OSR	
DEG2	86	OSR	
DEG3	85	OSR	
DEG4	82	OSR	
DEG5	81	OSR	
DEG6	80	OSR	
DEG7	79	OSR	
DEB0	78	OSR	DEPort Blue Pixel Data. In dual pixel output mode these pins are the EVEN blue outputs.
DEB1	77	OSR	
DEB2	74	OSR	
DEB3	73	OSR	
DEB4	71	OSR	
DEB5	70	OSR	
DEB6	67	OSR	
DEB7	66	OSR	

3.3. Description of Pins IC2201, continued

Port D Pin Descriptions

Name	Pin(s)	Type	Function
VCLK	72	I/O D5	DVPort Pixel Clock. The VCLK pin is used for DV port image capture. The polarity can be selected by the VCLKPOL bit.
VPEN	55	I/O D5	DVPort Pixel Enable. Used when external flow control capture mode is enabled by the EXTFCE bit. When VPEN is active, the input data is valid. The polarity can be selected by the PENPOL bit. Use of this pin allows non-contiguous input data.
PORTD0	63	I/O D5	PORTD(7:0) can be used as GPO (Output Only).
PORTD1	62	I/O D5	
PORTD2	61	I/O D5	
PORTD3	60	I/O D5	
PORTD4	59	I/O D5	
PORTD5	58	I/O D5	
PORTD6	57	I/O D5	
PORTD7	56	I/O D5	

Display/Odd Port Pin Descriptions

Name	Pin(s)	Type	Function
DOR0	131	I/O SR5	DOPort Red Pixel Data. In dual pixel output mode these pins are the ODD red outputs. In single pixel output mode these pins are not used.
DOR1	130	I/O SR5	
DOR2	129	I/O SR5	
DOR3	128	I/O SR5	
DOR4	127	I/O SR5	
DOR5	126	I/O SR5	
DOR6	125	I/O SR5	
DOR7	124	I/O SR5	

3.3. Description of Pins IC2201, continued

Display/Odd Port Pin Descriptions (continued)

Name	Pin(s)	Type	Function
DOG0	121	I/O SR5	DOPort Green Pixel Data. In dual pixel output mode these pins are the ODD green outputs. In single pixel output mode these pins are not used.
DOG1	120	I/O SR5	
DOG2	119	I/O SR5	
DOG3	118	I/O SR5	
DOG4	117	I/O SR5	
DOG5	116	I/O SR5	
DOG6	115	I/O SR5	
DOG7	114	I/O SR5	
DOB0	113	I/O SR5	DOPort Blue Pixel Data. In dual pixel output mode these pins are the ODD blue outputs. In single pixel output mode these pins are not used.
DOB1	112	I/O SR5	
DOB2	111	I/O SR5	
DOB3	110	I/O SR5	
DOB4	109	I/O SR5	
DOB5	108	I/O SR5	
DOB6	100	I/O SR5	
DOB7	99	I/O SR5	

Microprocessor Interface Pin Descriptions

Name	Pin(s)	Type	Function
WR	195	I/O D5	Write Enable. Low indicates a write to external RAM or other devices.
RD	196	I/O D5	Read Enable. Low indicates a read to external RAM or other devices.
ROMOE	197	OS	ROM Output Enable. Low output indicates a read from external ROM.
ROMWE	198	OS	ROM Write Enable. Low indicates a write to external ROM.
CS0	199	I/O D5	Miscellaneous Chip Select 0. Low selects external devices.
CS1	200	I/O D5	Miscellaneous Chip Select 1. When EXTRAMEN=0, low selects external devices. Chip select for external RAM. When EXTRAMEN=1, low selects external RAM. (RAMCS)
NMI	194	ID 5	Non-Maskable Interrupt. A high input triggers a non-maskable interrupt to the on-chip microprocessor.

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3.3. Description of Pins IC2201, continued

Microprocessor Interface Pin Descriptions (continued)

Name	Pin(s)	Type	Function
A1	193	I/O D5	Microprocessor address bus output bits (19:1).
A2	192	I/O D5	
A3	191	I/O D5	
A4	190	I/O D5	
A5	189	I/O D5	
A6	188	I/O D5	
A7	183	I/O D5	
A8	182	I/O D5	
A9	181	I/O D5	
A10	180	I/O D5	
A11	179	I/O D5	
A12	178	I/O D5	
A13	177	I/O D5	
A14	176	I/O D5	
A15	175	I/O D5	
A16	164	I/O D5	
A17	163	I/O D5	
A18	162	I/O D5	
A19	161	I/O D5	
D0	160	I/O D5	Microprocessor 16-bit bidirectional data bus.
D1	159	I/O D5	
D2	158	I/O D5	
D3	157	I/O D5	
D4	156	I/O D5	
D5	155	I/O D5	
D6	154	I/O D5	
D7	153	I/O D5	
D8	152	I/O D5	
D9	151	I/O D5	
D10	150	I/O D5	
D11	149	I/O D5	
D12	148	I/O D5	
D13	145	I/O D5	
D14	144	I/O D5	
D15	143	I/O D5	

3.3. Description of Pins IC2201, continued

Peripheral Interface Pin Descriptions

Name	Pin(s)	Type	Function
PORTA0	208	I/O U5	General-purpose I/O port bit controlled by PADAT0 and PAEN0. This pin has one other possible function when EXTRAMEN=1. When EXTRAMEN=1 and PAEN0=0, PORTA1 is microprocessor address bit 0 (A0).
PORTA1	207	I/O U5	General-purpose I/O port bit controlled by PADAT1 and PAEN1. This pin has one other possible function when EXTRAMEN=1. When EXTRAMEN=1 and PAEN1=0, PORTA1 is microprocessor byte-high enable (BHEN)
PORTA2	206	I/O U5	General-purpose I/O port bit controlled by PADAT2 and PAEN2.
PORTA3	205	I/O U5	General-purpose I/O port bit controlled by PADAT3 and PAEN3. This pin can also function as an external clock source for DCLK (DCLKEXT) when both the internal PLLs are disabled or when DPLLBYP=1.
PORTA4	204	I/O U5	General-purpose I/O port bit controlled by PADAT4 and PAEN4. This pin has one other possible function when IREN=1. When IREN=1 and PAEN4=1, this pin can function as an input to the on-chip IR receiver 0. (IRRCVR0)
PORTA5	203	I/O U5	General-purpose I/O port bit controlled by PADAT5 and PAEN5. This pin has other possible functions depending on the IREN, EIEN registers. When EIEN=1 and PAEN5=1, this pin can function as an external interrupt to the on-chip CPU. When IREN=1 and PAEN5=1, this pin can function as an input to the on-chip IR receiver 1 (IRRCVR1). When DPLLBYP=1 and PAEN=0, this pin becomes the output of the DCLK PLL. This output can be routed through an external spread spectrum chip and then back into port A3 (DCLK input) to implement spread spectrum.
PORTA6	202	I/O U5	General-purpose I/O port bit controlled by PADAT6 and PAEN6. This pin has one other possible function when PREF1EN=1. When PREF1EN=1 and PAEN6=0, PORTA6 is a variable duty-cycle pulse reference generator (PWM) output controlled by PREF1HI and PREF1LO.
PORTA7	201	I/O D5	General-purpose I/O port bit controlled by PADAT7 and PAEN7. This pin has one other possible function when PREF0EN=1. When PREF0EN=1 and PAEN7=0, PORTA7 is a variable duty-cycle pulse reference generator (PWM) output controlled by PREF0HI and PREF0LO.
RXD	53	I/O U5	Serial Receive Data. RXD is the serial receive data for the on-chip serial port. This pin can also function as the 2-wire master data pin when 2WMEN=16.
TXD	54	I/O U5	Serial Transmit Data. TXD is the serial transmit data for the on-chip serial port. This pin can also function as the 2-wire master clock output pin when 2WMEN=16.

Miscellaneous Pin Descriptions

Name	Pin(s)	Type	Function
TESTEN	137	ID 5	Test Mode Enable. Connect to ground for normal operation.
RESET_N	132	BOD	Reset Output. RESET_N is a bidirectional pin that can be used to either drive external logic in the system or receive an external reset signal.
XI	169	I	Crystal Input. Connect to external crystal. XI can also function as the MCLK input LVTTL-level signal from an external oscillator.
XO	170	O	Crystal Output. Connect to external crystal.

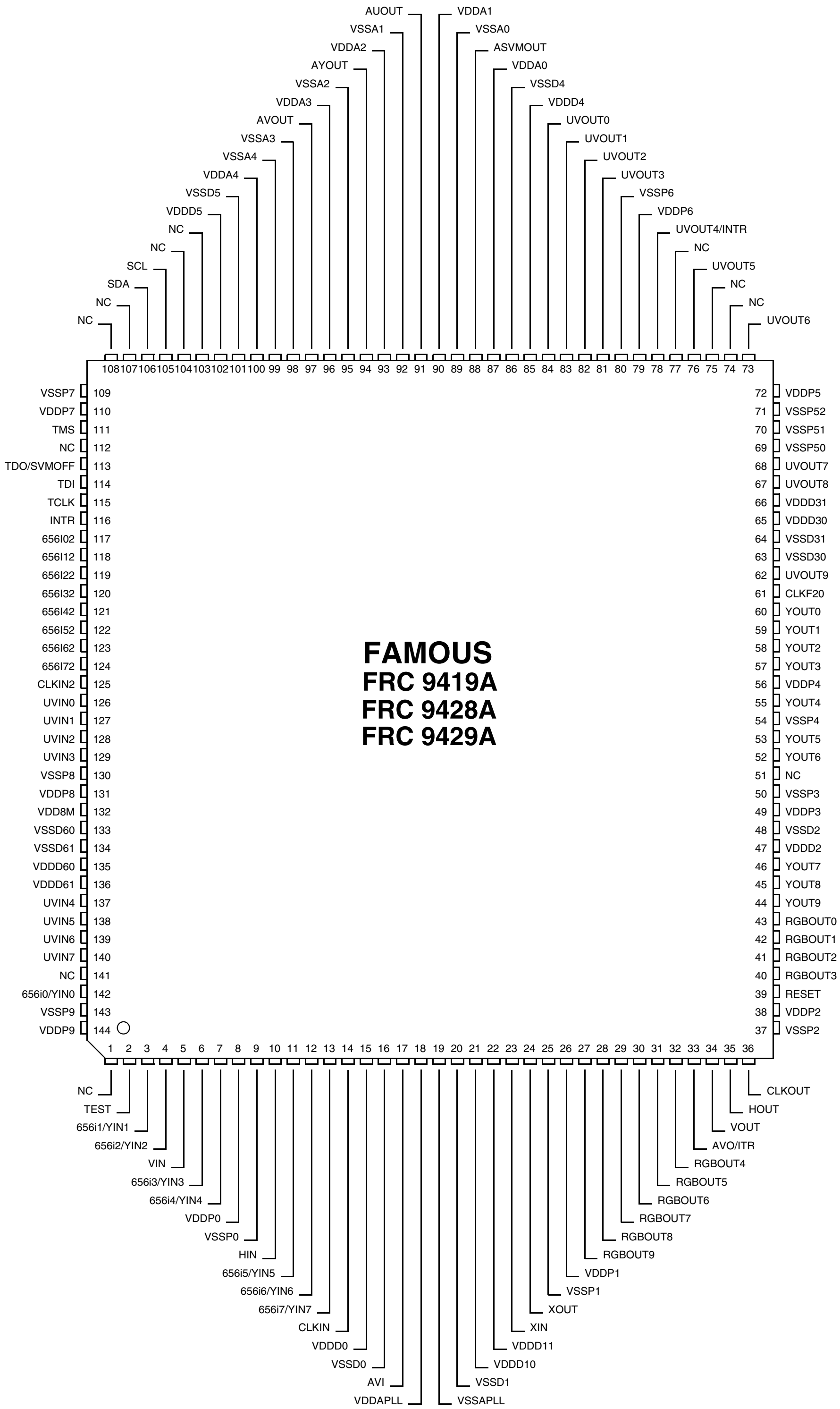
3.3. Description of Pins IC2201, continued

Power and Ground Pin Descriptions

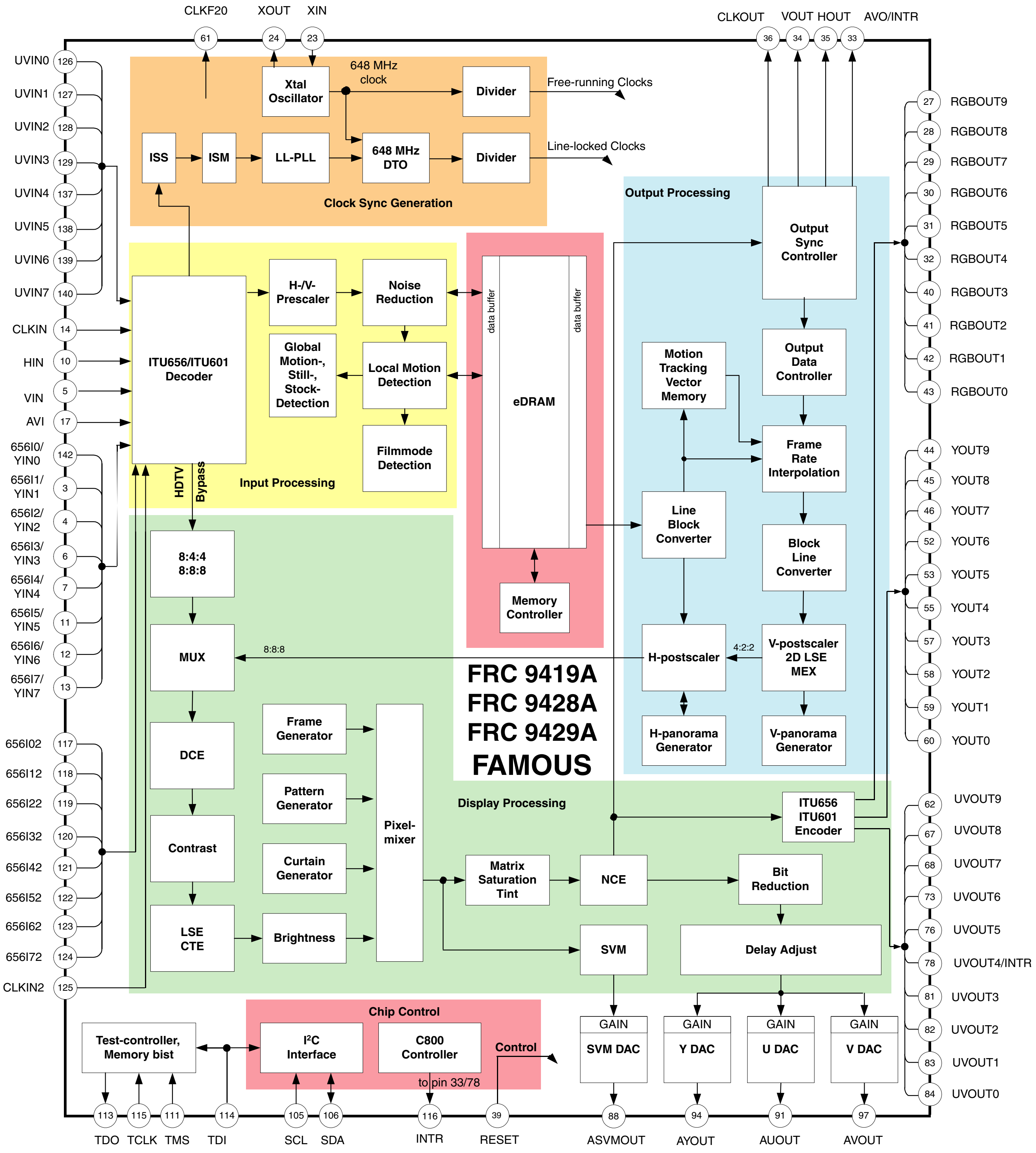
Name	Pin(s)	Type	Function
VDD1	75, 95, 135, 146, 173, 184	P	1.8V digital core power.
VSS	76, 96, 136, 147, 174, 185	P	Digital core ground.
VDDQ3	68, 83, 104, 122, 133, 171, 186	P	3.3V digital I/O power.
VSSQ	69, 84, 105, 123, 134, 172, 187	P	Digital I/O ground.
VDDPA1	167	P	1.8V analog clock generator power.
VDDPA2	165	P	1.8V analog clock generator power.
VSSPA1	168	P	Clock generator analog ground.
VSSPA2	166	P	Clock generator analog ground.
PVD	22, 24, 26	P	1.8V PLL power.
PGND	21, 25, 27	P	PLL ground.
DVDD1	1, 3, 20	P	1.8V ADC digital power.
DGND1	2, 4, 19	P	ADC digital ground.
ALVDD	28, 29	P	1.8V ADC PLL power.
ALGND	30, 31	P	ADC PLL ground.
AVDD	6, 18, 32, 33, 36, 39, 41, 46, 48, 52	P	3.3V ADC analog power.
AGND	9, 12, 34, 35, 38, 40, 42, 45, 47, 49, 51	P	ADC analog ground.

4. IC6004 (RH-IXB064WJZZ)

4.1. FRC Pin Configuration IC6004


FAMOUS
FRC 9419A
FRC 9428A
FRC 9429A
1 NC
2 TEST
3 656i1/YIN1
4 656i2/YIN2
5 VIN
6 656i3/YIN3
7 656i4/YIN4
8 VDDP0
9 VSSP0
10 HIN
11 656i5/YIN5
12 656i6/YIN6
13 656i7/YIN7
14 CLKIN
15 VDDD0
16 VSSD0
17 AVI
18 VDDAPLL
19 VSSAPLL
20 VSSD1
21 VDDD10
22 VDDD11
23 XIN
24 XOUT
25 VSSP1
26 VDDP1
27 RGBOUT9
28 RGBOUT8
29 RGBOUT7
30 RGBOUT6
31 RGBOUT5
32 RGBOUT4
33 AVO/ITR
34 VOUT
35 HOUT
36 CLKOUT
37 VSSP2
38 VDDP2
39 RESET
40 RGBOUT3
41 RGBOUT2
42 RGBOUT1
43 RGBOUT0
44 YOUT9
45 YOUT8
46 YOUT7
47 VDDD2
48 VSSD2
49 VDDP3
50 VSSP3
51 NC
52 YOUT6
53 YOUT5
54 VSSP4
55 YOUT4
56 VDDP4
57 YOUT3
58 YOUT2
59 YOUT1
60 YOUT0
61 CLKF20
62 UVOUT9
63 VSSD30
64 VSSD31
65 VDDD30
66 VDDD31
67 UVOUT8
68 UVOUT7
69 VSSP50
70 VSSP51
71 VSSP52
72 VDDP5
73 UVOUT6
74 NC
75 NC
76 UVOUT5
77 NC
78 UVOUT4/INTR
79 VDDP6
80 VSSP6
81 UVOUT3
82 UVOUT2
83 UVOUT1
84 UVOUT0
85 VDDD4
86 VSSD4
87 VDDA0
88 ASVMOUT
89 VSSA0
90 VDDA1
91 AUOUT
92 VSSA1
93 VDDA2
94 AYOUT
95 VSSA2
96 VDDA3
97 AVOUT
98 VSSA3
99 VSSA4
100 VDDA4
101 VSSD5
102 VDDD5
103 NC
104 NC
105 SCL
106 SDA
107 NC
108 NC
109 VSSP7
110 VDDP7
111 TMS
112 NC
113 TDO/SVMOFF
114 TDI
115 TCLK
116 INTR
117 656I02
118 656I12
119 656I22
120 656I32
121 656I42
122 656I52
123 656I62
124 656I72
125 CLKIN2
126 UVIN0
127 UVIN1
128 UVIN2
129 UVIN3
130 VSSP8
131 VDDP8
132 VDD8M
133 VSSD60
134 VSSD61
135 VDDD60
136 VDDD61
137 UVIN4
138 UVIN5
139 UVIN6
140 UVIN7
141 NC
142 656i0/YIN0
143 VSSP9
144 VDDP9

4.2. Block Diagram IC6004


CLKF20
XOUT
XIN
CLKOUT
VOUT HOUT
AVO/INTR
61
24
23
36
34
35
33
648 MHz clock
Xtal Oscillator
Divider
Free-running Clocks
ISS
ISM
LL-PLL
648 MHz DTO
Divider
Line-locked Clocks
Clock Sync Generation
UVIN0 126
UVIN1 127
UVIN2 128
UVIN3 129
UVIN4 137
UVIN5 138
UVIN6 139
UVIN7 140
CLKIN 14
HIN 10
VIN 5
AVI 17
656I0/ YIN0 142
656I1/ YIN1 3
656I2/ YIN2 4
656I3/ YIN3 6
656I4/ YIN4 7
656I5/ YIN5 11
656I6/ YIN6 12
656I7/ YIN7 13
656I02 117
656I12 118
656I22 119
656I32 120
656I42 121
656I52 122
656I62 123
656I72 124
CLKIN2 125
ITU656/ITU601 Decoder
H-/V-Prescaler
Noise Reduction
Global Motion-, Still-, Stock-Detection
Local Motion Detection
Filmmode Detection
HDTV
Bypass
Input Processing
data buffer
eDRAM
data buffer
Memory Controller
Output Processing
Output Sync Controller
Output Data Controller
Motion Tracking Vector Memory
Frame Rate Interpolation
Line Block Converter
Block Line Converter
H-postscaler
4:2:2
V-postscaler 2D LSE MEX
H-panorama Generator
V-panorama Generator
8:4:4 8:8:8
MUX
8:8:8
DCE
Contrast
LSE CTE
Frame Generator
Pattern Generator
Curtain Generator
Brightness
Pixel-mixer
FRC 9419A
FRC 9428A
FRC 9429A
FAMOUS
Display Processing
ITU656 ITU601 Encoder
Matrix Saturation Tint
NCE
Bit Reduction
SVM
Delay Adjust
GAIN SVM DAC
GAIN Y DAC
GAIN U DAC
GAIN V DAC
27 RGBOUT9
28 RGBOUT8
29 RGBOUT7
30 RGBOUT6
31 RGBOUT5
32 RGBOUT4
40 RGBOUT3
41 RGBOUT2
42 RGBOUT1
43 RGBOUT0
44 YOUT9
45 YOUT8
46 YOUT7
52 YOUT6
53 YOUT5
55 YOUT4
57 YOUT3
58 YOUT2
59 YOUT1
60 YOUT0
62 UVOUT9
67 UVOUT8
68 UVOUT7
73 UVOUT6
76 UVOUT5
78 UVOUT4/INTR
81 UVOUT3
82 UVOUT2
83 UVOUT1
84 UVOUT0
Chip Control
Test-controller, Memory bist
I²C Interface
C800 Controller
Control
to pin 33/78
113
115
111
114
105
106
116
39
88
94
91
97
TDO
TCLK
TMS
TDI
SCL
SDA
INTR
RESET
ASVMOUT
AYOUT
AUOUT
AVOUT

4.3. Description of Pins IC6004

NC = not connected, leave vacant
LV = not used, leave vacant

Pin No. PMQFP144-4	Pin Name	Type	Connection (If not used)	Short Description
1			NC	NC
2			LV	Test, do not use
3	656I1/YIN1	I	LV (pull down)	Digital (luminance) input
4	656I2/YIN2	I	LV (pull down)	Digital (luminance) input
5	VIN	I	LV (pull down)	Vertical sync input
6	656I3/YIN3	I	LV (pull down)	Digital (luminance) input
7	656I4/YIN4	I	LV (pull down)	Digital (luminance) input
8	VDDP0	S		Supply digital pad (3.3 V)
9	VSSP0	S		Supply digital pad (0 V)
10	HIN	I	LV (pull down)	Horizontal sync input
11	656I5/YIN5	I	LV (pull down)	Digital (luminance) input
12	656I6/YIN6	I	LV (pull down)	Digital (luminance) input
13	656I7/YIN7	I	LV (pull down)	Digital (luminance) input [MSB]
14	CLKIN	I		Clock input (max. 81.0 MHz)
15	VDDD0	S		Supply digital pad (1.8 V)
16	VSSD0	S		Supply digital pad (0 V)
17	AVI	I	LV (pull down)	Active video input
18	VDDAPLL	S		Supply analog PLL (1.8 V)
19	VSSAPLL	S		Supply analog PLL (0 V)
20	VSSD1	S		Supply digital core (0 V)
21	VDDD10	S		Supply digital core (1.8 V)
22	VDDD11	S		Supply digital core (1.8 V)
23	XIN	I		Crystal connection 1

4.3. Description of Pins IC6004, continued

Pin No. PMQFP144-4	Pin Name	Type	Connection (If not used)	Short Description
24	XOUT	O	LV (pull down)	Crystal connection 2
25	VSSP1	S		Supply digital pad (0 V)
26	VDDP1	S		Suplly digital pad (3.3 V)
27	RGBOUT9	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output [MSB](**SELOMODE**=1)
28	RGBOUT8	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output (**SELOMODE**=1)
29	RGBOUT7	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output (**SELOMODE**=1)
30	RGBOUT6	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output (**SELOMODE**=1)
31	RGBOUT5	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) output (**SELOMODE**=1)
32	RGBOUT4	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output (**SELOMODE**=1)
33	AVO/ITR	O	LV	Active video output (**CPUIRQ**=0) Interrupt signal output from µC (**CPUIRQ**=1) Static 0 (**CPUIRQ**=2) Static 1 (**CPUIRQ**=3)
34	VOUT	O	LV	Vertical sync output
35	HOUT	O	LV	Horizontal sync output. (Synchronized to 40.5-81 MHz **CLKOUTSEL72**=1) (Synchronized to 20.25-40.5 MHz **CLKOUTSEL72**=0 and **CLKOUTSEL**=1) (Synchronized to 15.1875-30.75 MHz **CLKOUTSEL72**=0 and **CLKOUTSEL**=0)
36	CLKOUT	O	LV	Output clock disabled (**CLKOUTON**=0) Output clock (max. 81 MHz) (**CLKOUT**=1) (40.5-81 MHz **CLKOUT72**=1 20.25-40.5 MHz **CLKOUT72**=0 and **CLKOUTSEL**=1 1515.1875-30.37 MHz **CLKOUT72**=0 and **CLKOUTSEL**=0)
37	VSSP2	S		Supply digital pad (0 V)
38	VDDP2	S		Supply digital pad (3.3 V)

4.3. Description of Pins IC6004, continued

Pin No. PMQFP144-4	Pin Name	Type	Connection (If not used)	Short Description
39	RESET	I		Reset input
40	RGBOUT3	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output (**SELOMODE**=1)
41	RGBOUT2	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output (**SELOMODE**=1)
42	RGBOUT1	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output (**SELOMODE**=1)
43	RGBOUT0	O	LV	Tristate (**SELOMODE**=0) Digital (red: **SELRB**=0; blue: **SELRB**=1;) Output [LSB] (**SELOMODE**=1)
44	YOUT9	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output [MSB] (**ENITUE**=1)
45	YOUT8	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)
46	YOUT7	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)
47	VDDD2	S		Supply digital core (1.8 V)
48	VSSD2	S		Supply digital core (0 V)
49	VDDP3	S		Supply digital pad (3.3 V)
50	VSSP3	S		Supply digital pad (0 V)
51			NC	NC
52	YOUT6	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)
53	YOUT5	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)
54	VSSP4	S		Supply digital pad (0 V)
55	YOUT4	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)
56	VDDP4	S		Supply digital pad (3.3 V)
57	YOUT3	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)
58	YOUT2	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)
59	YOUT1	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output (**ENITUE**=1)

4.3. Description of Pins IC6004, continued

Pin No. PMQFP144-4	Pin Name	Type	Connection (If not used)	Short Description
60	YOUT0	O	LV	Tristate (**ENITUE**=0) Digital (luminance/green) output [LSB] (**ENITUE**=1)
61	CLKF20	O	LV	Output clock 20.25 MHz disabled (**CLKF20ON**=0) Output clock 20.25 MHz enabled (**CLKF20ON**=1)
62	UVOUT9	O	LV	Tristate (**ENITUE**=0) Digital (chrominance/blue) output [MSB] (**ENITUE**=1 and **SELRB**=0) Digital (chrominance/red) output [MSB] (**ENITUE**=1 and **SELRB**=1)
63	VSSD30	S		Supply digital core (0 V)
64	VSSD31	S		Supply digital core (0 V)
65	VDDD30	S		Supply digital core (1.8 V)
66	VDDD31	S		Supply digital core (1.8 V)
67	UVOUT8	O	LV	Tristate (**ENITUE**=0) Digital (chrominance/blue) output (**ENITUE**=1 and **SELRB**=0) Digital (chrominance/red) output (**ENITUE**=1 and **SELRB**=1)
68	UVOUT7	O	LV	Tristate (**ENITUE**=0) Digital (chrominance/blue) output (**ENITUE**=1 and **SELRB**=0) Digital (chrominance/red) output (**ENITUE**=1 and **SELRB**=1)
69	VSSP50	S		Supply digital pad (0 V)
70	VSSP51	S		Supply digital pad (0 V)
71	VSSP52	S		Supply digital pad (0 V)
72	VDDP5	S		Supply digital pad (3.3 V)
73	UVOUT6	O	LV	Tristate (**ENITUE**=0) Digital (chrominance/blue) output (**ENITUE**=1 and **SELRB**=0) Digital (chrominance/red) output (**ENITUE**=1 and **SELRB**=1)
74			NC	NC
75			NC	NC
76	UVOUT5	O	LV	Tristate (**ENITUE**=0) Digital (chrominance/blue) output (**ENITUE**=1 and **SELRB**=0) Digital (chrominance/red) output (**ENITUE**=1 and **SELRB**=1)
77			NC	NC

4.3. Description of Pins IC6004, continued

Pin No. PMQFP144-4	Pin Name	Type	Connection (If not used)	Short Description
94	AYOUT	O	LV	Middle level (**STANDBY**=0) Luminance output (**STANDBY**=1)
95	VSSA2	S		Supply analog DAC G/Y (0 V)
96	VDDA3	S		Supply analog DAC R/V (3.3 V)
97	AVOUT	O	LV	Middle level (**STANDBY**=0) Chrominance output (**STANDBY**=1)
98	VSSA3	S		Supply analog DAC R/V (0 V)
99	VSSA4	S		Supply analog band gap (0 V)
100	VDDA4	S		Supply analogband gap (3.3 V)
101	VSSD5	S		Supply digital core (0 V)
102	VDDD5	S		Supply digital core (1.8 V)
103			NC	NC
104			NC	NC
105	SCL	I/O		I²C bus clk
106	SDA	I/O		I²C bus data
107			NC	NC
108			NC	NC
109	VSSP7	S		Supply digital pad (0 V)
110	VDDP7	S		Supply digital pad (3.3 V)
111	TMS	I	Connect to VDD (3.3 V)	Test mode select (3.3 V)
112			NC	NC
113	TDO/ SVMOFF	O/I	LV	Test data out (**ACTSVMOFF**=1) SVM input signal (**ACTSVMOFF**=0)
114	TDI	I	Connect to VSS (0 V)	Test data in (0 V)
115	TCLK	I	Connect to VDD (3.3 V)	Test clock (3.3 V)
116	INTR	O	LV	Interrupt signal Static 0 (**CPUIRQ2**=00) Static 1 (**CPUIRQ2**=01) Interrupt signal output from µC (**CPUIRQ2**= 1x)
117	656I02	I	LV (pull down)	Digital (luminance) input [LSB]

4.3. Description of Pins IC6004, continued

Pin No. PMQFP144-4	Pin Name	Type	Connection (If not used)	Short Description
118	656I12	I	LV (pull down)	Digital (luminance) input
119	656I22	I	LV (pull down)	Digital (luminance) input
120	656I32	I	LV (pull down)	Digital (luminance) input
121	656I42	I	LV (pull down)	Digital (luminance) input
122	656I52	I	LV (pull down)	Digital (luminance) input
123	656I62	I	LV (pull down)	Digital (luminance) input
124	656I72	I	LV (pull down)	Digital (luminance) input
125	CLKIN2	I	LV (pull down)	Clock input [max. 81.0 MHz]
126	UVIN0	I	LV (pull down)	Digital (chrominance) input [LSB]
127	UVIN1	I	LV (pull down)	Digital (chrominance) input
128	UVIN2	I	LV (pull down)	Digital (chrominance) input
129	UVIN3	I	LV (pull down)	Digital (chrominance) input
130	VSSP8	S		Supply digital core (0 V)
131	VDDP8	S		Supply digital core (3.3 V)
132	VDD8M	S		Supply memory (1.8 V)
133	VSSD60	S		Supply digital core (0 V)
134	VSSD61	S		Supply digital core (0 V)
135	VDDD60	S		Supply digital core (1.8V)
136	VDDD61	S		Supply digital core (1.8 V)
137	UVIN4	I	LV (pull down)	Digital (chrominance) input
138	UVIN5	I	LV (pull down)	Digital (chrominance) input
139	UVIN6	I	LV (pull down)	Digital (chrominance) input
140	UVIN7	I	LV (pull down)	Digital (chrominance) input [MSB]

4.3. Description of Pins IC6004, continued

Pin No. **PMQFP144-4**	**Pin Name**	**Type**	**Connection** **(If not used)**	**Short Description**
141			NC	NC
142	656I0/YIN0	I	LV (pull down)	Digital (luminance) input [LSB]
143	VSSP9	S		Supply digital pad (0 V)
144	VDDP9	S		Supply digital pad (3.3 V)

PARTS LISTING

REPLACEMENT PARTS

Replacement parts which have special safety characteristics are identified in this manual. Electrical components having such features are identified by ⚠ in the Replacement Parts Listing.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended is not permitted.

Replacement parts not shown in this service manual may create shock fire, or other hazards.

HOW TO ORDER REPLACEMENT PARTS

To have your order completed promptly and correctly please supply the following information.

1. MODEL NUMBER	2. REF. NO.
3. PART NO.	4. DESCRIPTION
5. CODE	6. QUANTITY

MARK *: SPARE PARTS DELIVERY SECTION

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
			LCD UNIT			
		CLAMPA042FE13	LCD 26" PANEL UNIT LC26GA5E	J	CX	DW
		CLAMPA050VJ05	LCD 32" PANEL UNIT ADJ LC32GA5E	J	**	**
		LC-26GA5E PRINTED WIRING BOARDS				
	PWB-A	DUNTKC656WE03	MAIN LC26GA5E	S	BU	CN
	PWB-B	DUNTKC864WE03	OPERATION UNIT LC26GA5EE	S	AK	AV
	PWB-C	DUNTKC865WE03	R/C LED UNIT LC26GA5EE	S	AK	AW
	PWB-D	DUNTKC919FE01	LCD CONTROL LC26GA5E	J	BN	CE
	PWB-E	DUNTKC920WE01	COMPONENTS LC26GA5EE	S	AG	AS
⚠	PWB-F	RDENCA101WJZZ	POWER SYPPLY UNIT	J	BG	BY
⚠	PWB-G	RUNTKA094WJZZ	INVERTER PSD-0397	J	AZ	BN
⚠	PWB-H	RUNTKA095WJZZ	INVERTER PSD-0398	J	AM	AY
		LC-32GA5E PRINTED WIRING BOARDS				
	PWB-A	DUNTKC656WE08	MAIN LC32GA5E	S	BU	CN
	PWB-B	DUNTKC864WE08	OPERATION UNIT LC32GA5EE	S	AK	AV
	PWB-C	DUNTKC865WE08	R/C LED UNIT LC32GA5EE	S	AK	AW
	PWB-D	DUNTKC919FE02	LCD CONTROL LC32GA5E	J	BQ	CG
	PWB-E	DUNTKC920WE01	COMPONENTS LC26GA5EE	S	AG	AS
⚠	PWB-F	RDENCA102WJZZ	POWER SYPPLY UNIT	J	BH	BZ
⚠	PWB-G	RUNTKA096WJZZ	INVERTER PSD-0396-A	J	AV	BG
⚠	PWB-H	RUNTKA097WJZZ	INVERTER PSD-0396-B	J	AV	BG
⚠	PWB-I	RUNTKA098WJZZ	INVERTER PSD-0396-C	J	AN	AZ
		MAIN UNIT				
		INTEGRATED CIRCUITS				
	IC 0704	VHINJ78L08U-1	IC NJM78L08UA(TE1)	S	AA	AC
	IC 1001	RH-IXB058WJZZ	IC VCT49XY PQMQFP144-2 MICRONAS	S	AX	BM
	IC 1002	RH-IXA826WJZZ	IC M29W8000DB70N6	S	AF	AR
	IC 1002 (*)	CH - I XA826CJE0	WITH SOFT FLASH VCT M29W8000DB70N6 GA5E	S	AG	AT
	IC 1003	RH-IXA757WJN1	IC M24128-BWMN6T	S	AC	AH
	IC 1004	RH-IXB237WJZZ	IC LM1117DTX-1.8	S	AB	AE
	IC 1005	RH-IXB060WJZZ	IC IS62WV2568BLL ISSI	S	AG	AT
	IC 1006	RH-IXB233WJZZ	IC XC2C324VQG44C	S	AE	AN
	IC 1006 (*)	CH - I XB233CJE0	WI TH SOFT CPLD IC XC2C32 GA5E	S	AF	AP
	IC 1008	RH-IXB234WJZZ	IC SST25LF080334CS2AE	S	AG	AR
	IC 1008 (*)	CH - I XB234CJE0	WI TH SOFT SERI AL FLASH SST25LF080A GA5E	S	AH	AS
	IC 1009	RH-IXB235WJZZ	IC NCP301LSN18T1G ONSEMI	S	AA	AD
	IC 1010	VHITC7S14FU-1	IC TC7S14FU(TE85L)	S	AA	AC
	IC 1201	RH-IXB244WJZZ	IC SA612AD,118 PHILIPS	S	AD	AM
	IC 1301	VHITA2024++-1	IC TA2024	S	AL	AX
	IC 1351	VHIBH3543F+-1	IC BH3543F-E2-A1 ROHM	S	AB	AE
	IC 1401	VHIBU4052BF-1	IC BU4052BCF-E2	S	AA	AD
	IC 1402	VHINJM4560M-1	IC NJM4560M-T1	S	AA	AC
	IC 1403	VHIBU4053V/-1	IC BU4053BCFV-E2-A1 ROHM	S	AA	AD
	IC 1801	RH-IXB063WJZZ	IC PI5V330WEX PERICOM	S	AC	AG
	IC 1802	VHITC7S02U/-1	IC TC7S02FU(TE85L)	S	AA	AC
	IC 1803	VHITC7S08U/-1	IC TC7S08FU(TE85L)	S	AA	AC
	IC 2201	RH-IXB372WJZZ	IC PW1306-20QL PIXELWORKS	S	AQ	BB
	* IC With software recorded.					
	IC 2202	VHIBR24L16F-1	IC BR24L16F-E2	S	AA	AD
	IC 2203	RH-IXB063WJZZ	IC PI5V330WEX PERICOM	S	AC	AG
	IC 2205	VHIBU4053V/-1	IC BU4053BCFV-E2-A1 ROHM	S	AA	AD
	IC 2206	RH-IXB266WJZZ	IC 74LCX32 FAIRCHILD	S	AA	AC
	IC 2207	VHITLVD823+-1	IC THC63LVD823	S	AM	AY
	IC 2210	RH-IXA764WJZZ	IC M29W800DT70N6	S	AG	AR
	IC 2210 (*)	CH - I XA764CJE0	WITH SOFT FLASH PW IC M29W800DT70N6 GA5E	S	AH	AT
	IC 2211	RH-IXB237WJZZ	IC LM1117DTX-1.8	S	AB	AE
	IC 2801	VHI24LC21//-1	EPROM 24LC21T-1/SN	S	AB	AE
	IC 6004	RH-IXB064WJZZ	IC FRC9429B MQFP144-4 MICRONAS	S	BB	BT
	IC 6008	RH-IXB237WJZZ	IC LM1117DTX-1.8	S	AB	AE
		TRANSISTORS				
	Q 0702	RH-TXA014WJZZ	TRT SI2312 VISHAY	S	AA	AC
	Q 1001	VS2SA1530AR-1	TRT SA1530A-T12-1R MITSUBISHI	S	AA	AA
	Q 1002	VS2SA1530AR-1	TRT SA1530A-T12-1R MITSUBISHI	S	AA	AA
	Q 1003	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
	Q 1004	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1005	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1008	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
	Q 1009	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
	Q 1010	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1011	VSDTA143EKA-1	TRT DTA143EKA-T146	S	AA	AA
	Q 1012	VSDTA143EKA-1	TRT DTA143EKA-T146	S	AA	AA
	Q 1013	VSDTA143EKA-1	TRT DTA143EKA-T146	S	AA	AA
	Q 1014	RH-TXA023WJZZ	TRT FDN306P FAIRCHILD	S	AA	AC
	Q 1201	RH-TXA019WJZZ	TRT BF570	S	AA	AB
	Q 1202	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1203	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1204	RH-TXA019WJZZ	TRT BF570	S	AA	AB
	Q 1301	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1302	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
	Q 1401	VS2SA1530AR-1	TRT SA1530A-T12-1R MITSUBISHI	S	AA	AA
	Q 1402	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
	Q 1403	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1404	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1406	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1408	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1409	VSDTC114EKA-1	TRT DTC114EKAT146	S	AA	AA
	Q 1410	VS2SA1530AR-1	TRT SA1530A-T12-1R MITSUBISHI	S	AA	AA
	Q 1411	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
	Q 1412	VSDTC314TK/-1	TRT DTC314TKT146-A1 ROHM	S	AA	AB
	Q 1413	VSDTC114EKA-1	TRT DTC114EKAT146	S	AA	AA
	Q 1801	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
	Q 1802	RH-TXA021WJZZ	TRT BF824 PHILIPS	S	AA	AB
	Q 1803	RH-TXA021WJZZ	TRT BF824 PHILIPS	S	AA	AB
	Q 1804	RH-TXA021WJZZ	TRT BF824 PHILIPS	S	AA	AB
	Q 1809	VSDTC114EKA-1	TRT DTC114EKAT146	S	AA	AA
		DIODES				
	D 1001	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
	D 1004	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
	D 1203	RH-EX0906CEZZ	ZENER DIODE UDZTE-17 30B	S	AA	AA
	D 1204	RH-DXA038WJZZ	DIODE BA792,118 PHILIPS	S	AA	AB
	D 1205	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
	D 1303	RH-EX1259CEZZ	ZENER DIODE HZU8.2B2TRF	S	AA	AA
	D 1304	RH-EX1259CEZZ	ZENER DIODE HZU8.2B2TRF	S	AA	AA
	D 1305	RH-EX1259CEZZ	ZENER DIODE HZU8.2B2TRF	S	AA	AA
	D 1306	RH-EX1259CEZZ	ZENER DIODE HZU8.2B2TRF	S	AA	AA
	D 1307	RH-EX1245CEZZ	ZENER DIODE HZU5,1B3TRF	S	AA	AA
	D 1309	RH-EX1393CEZZ	ZENER DIODE UDZS TE-17 5,1B	S	AA	AA
	D 1310	RH-EXA088WJZZ	ZENER DIODE UDZS TE-17 3,9B ROHM	S	AA	AA
	D 1401	RH-EX1262CEZZ	ZENER DIODE HZU9.1B2TRF	S	AA	AA
	D 1402	RH-EX1262CEZZ	ZENER DIODE HZU9.1B2TRF	S	AA	AA
	D 1403	RH-EX1262CEZZ	ZENER DIODE HZU9.1B2TRF	S	AA	AA
	D 1404	RH-EX1262CEZZ	ZENER DIODE HZU9.1B2TRF	S	AA	AA
	D 1405	RH-EX1262CEZZ	ZENER DIODE HZU9.1B2TRF	S	AA	AA
	D 1406	RH-EX1262CEZZ	ZENER DIODE HZU9.1B2TRF	S	AA	AA
	D 1407	RH-EX1271CEZZ	ZENER DIODE HZU12B2TRF HITACHI	S	AA	AA
	* IC With software recorded.					

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
D 1408	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1409	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1410	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1411	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1412	RH-EX1250CEZZ	ZENER DIODE HZU6.2B2TRF	S	AA	AA
D 1413	RH-EX1264CEZZ	ZENER DIODE HZU10B1TRF HITACHI	S	AA	AA
D 1414	RH-EX1250CEZZ	ZENER DIODE HZU6.2B2TRF	S	AA	AA
D 1415	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1416	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1419	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1420	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 1421	RH-EX1271CEZZ	ZENER DIODE HZU12B2TRF HITACHI	S	AA	AA
D 1422	RH-EX1271CEZZ	ZENER DIODE HZU12B2TRF HITACHI	S	AA	AA
D 1423	RH-EX1250CEZZ	ZENER DIODE HZU6.2B2TRF	S	AA	AA
D 1424	RH-EX1250CEZZ	ZENER DIODE HZU6.2B2TRF	S	AA	AA
D 1425	RH-EX1250CEZZ	ZENER DIODE HZU6.2B2TRF	S	AA	AA
D 1426	RH-EX1250CEZZ	ZENER DIODE HZU6.2B2TRF	S	AA	AA
D 1427	RH-EX1250CEZZ	ZENER DIODE HZU6.2B2TRF	S	AA	AA
D 1428	RH-EX1277CEZZ	ZENER DIODE HZU15B2TRF	S	AA	AA
D 1429	RH-EX1277CEZZ	ZENER DIODE HZU15B2TRF	S	AA	AA
D 1432	RH-EX1264CEZZ	ZENER DIODE HZU10B1TRF HITACHI	S	AA	AA
D 1801	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
D 1802	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
D 1803	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
D 1804	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
D 1807	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
D 2203	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 2204	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 2801	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 2802	RH-EX1247CEZZ	ZENER DIODE HZU5.6B2TRF HITACHI	S	AA	AA
D 2803	RH-EX1247CEZZ	ZENER DIODE HZU5.6B2TRF HITACHI	S	AA	AA
D 2804	VHDRB425D//-1	DIODE RB425DT146	S	AA	AB
D 2805	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 2806	VHDMA157A//-1	DIODE MA157(TX)	S	AA	AA
D 6015	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
D 6016	RH-EX1271CEZZ	ZENER DIODE HZU12B2TRF HITACHI	S	AA	AA
	PACKAGED CIRCUITS				
X 1001	RCRSCA112WJZZ	CRYSTAL SMD-49 20.250MHZ	S	AB	AE
X 1201	RCRSCA088WJZZ	CRYSTAL 43.1MHz 4730008417 ACAL	S	AB	AE
X 2201	RCRSB0222GEZZ	CRYSTAL HC-49/U03,14.31818MHz	S	AB	AF
X 6002	RCRSC0012CEZZ	CRYSTAL DSX840GA 20,25MHz	S	AB	AE
	COILS				
L 1001	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1002	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1003	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1004	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1005	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1201	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1202	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 1203	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1204	VPD9MR82JR46N	PEAK COIL 0,82UH FSLM2520-R82	S	AA	AA
L 1205	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1206	VPD9MR82JR46N	PEAK COIL 0,82UH FSLM2520-R82	S	AA	AA
L 1301	RCILP0367CEZZ	COIL TSL0808S-100K2R6	S	AA	AA
L 1302	RCILP0367CEZZ	COIL TSL0808S-100K2R6	S	AA	AA
L 1303	RCILP0367CEZZ	COIL TSL0808S-100K2R6	S	AA	AA
L 1304	RCILP0367CEZZ	COIL TSL0808S-100K2R6	S	AA	AA
L 1401	VPD9M2R7J1R0N	PEAK COIL 2,7UH FSLM2520-2R7	S	AA	AA
L 1402	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 1404	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 1405	VPD9M2R7J1R0N	PEAK COIL 2,7UH FSLM2520-2R7	S	AA	AA
L 1407	VPD9M2R7J1R0N	PEAK COIL 2,7UH FSLM2520-2R7	S	AA	AA
L 1601	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1602	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 1807	VPCGM101M2R1N	COIL LB2518T101M 100UH	S	AA	AA
L 2201	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 2202	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 2203	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 2204	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 2205	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 2206	VPD9M270J3R2N	PEAK COIL 27UH FSLM2520-270	S	AA	AA
L 6009	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
L 6010	VPCGM100MR25N	COIL LB2518T100M 10UH	S	AA	AA
	FILTERS				
FL 3200	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3201	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3202	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3203	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3204	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3205	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3206	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3207	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3208	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
FL 3209	RCILFA071WJZZ	FILTER COIL DLP11SN900SL2L	S	AA	AC
	CAPACITORS				
C 0705	VCEASN1HN225M	ELEC C 2,2UF 20% 50V MKA50VC2R2MD55	S	AA	AA
C 0706	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1001	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1002	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1003	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1004	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1005	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1006	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1007	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1008	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1009	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1010	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1011	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1012	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1013	VCCCCY1HH180J	CAPACITOR GRM39CK 180J 50 (1608)SMD	S	AA	AA
C 1014	VCCCCY1HH150J	CAPACITOR GRM39CK 150J 50 (1608)	S	AA	AA
C 1015	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1016	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1017	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1018	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1019	VCEAPF1HN106M	ELEC C 10UF 20% 50V	S	AA	AA
C 1020	VCEASH1CN337M	ELEC C 330UF 20% 16V 16CV330AX-3	S	AA	AC
C 1021	VCKYCY1CF224Z	CAPACITOR GRM39F 224Z 16 (1608)SMD	S	AA	AA
C 1022	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1023	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1024	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1025	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1031	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1032	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1033	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1061	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1062	RC-KZA043WJZZ	CERAM C 10UF 6,3V GRM21BB10J106ME01L	S	AA	AB
C 1063	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1064	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1065	RC-EZ1274CEZZ	ELEC C 1000UF 16V URZ1C102MHR1CV	S	AA	AC
C 1066	VCKYCY1CF224Z	CAPACITOR GRM39F 224Z 16 (1608)SMD	S	AA	AA
C 1201	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1202	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1203	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1204	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1205	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1206	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 1207	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1208	VCEASN1HN335M	ELEC C 3,3UF 20% 50V MKA50VC3R3MD55	S	AA	AA
C 1209	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1210	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1211	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1212	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1213	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1214	VCCCCY1HH151J	CAPACITOR GRM39CK 151J 50 (1608)SMD	S	AA	AA
C 1215	VCCCCY1HH220J	CAPACITOR GRM39CK 220J 50 (1608)SMD	S	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
C 1216	VCCCCY1HH220J	CAPACITOR GRM39CK 220J 50 (1608)SMD	S	AA	AA
C 1217	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1218	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1219	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1220	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1301	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1302	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1303	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1304	VCEASN1HN335M	ELEC C 3,3UF 20% 50V MKA50VC3R3MD55	S	AA	AA
C 1305	VCKYCY1HB682K	CAPACITOR GRM39B 682K 50 (1608)SMD	S	AA	AA
C 1306	VCKYCY1HB682K	CAPACITOR GRM39B 682K 50 (1608)SMD	S	AA	AA
C 1307	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1308	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1309	VCKYTV1HF104Z	CERAM C 100NF 50V 2125SMD	S	AA	AA
C 1310	VCEASY1EN227M	ELEC C 220UF 20% 25V MLA25VC220MH10	S	AA	AC
C 1311	VCKYTV1EF224Z	CERAM C 220NF 25V 2125SMD	S	AA	AA
C 1312	VCKYTV1EF224Z	CERAM C 220NF 25V 2125SMD	S	AA	AA
C 1313	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1314	VCKYTV1EF224Z	CERAM C 220NF 25V 2125SMD	S	AA	AA
C 1315	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1316	VCKYTQ1EF105Z	CERAM C 1UF 25V 3216SMD	S	AA	AA
C 1317	VCKYTV1EF474Z	CERAM C 470NF 25V 2125SMD	S	AA	AA
C 1318	VCKYTV1EF224Z	CERAM C 220NF 25V 2125SMD	S	AA	AA
C 1319	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1320	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1321	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1322	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1325	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1326	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1327	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1328	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1329	VCKYTV1EB474K	CERAM C 470NF 25V 2125SMD	S	AA	AA
C 1330	VCKYTV1HF104Z	CERAM C 100NF 50V 2125SMD	S	AA	AA
C 1331	VCKYTQ1EF105Z	CERAM C 1UF 25V 3216SMD	S	AA	AA
C 1332	VCKYTV1HF104Z	CERAM C 100NF 50V 2125SMD	S	AA	AA
C 1333	VCEASY1EN227M	ELEC C 220UF 20% 25V MLA25VC220MH10	S	AA	AC
C 1351	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1352	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1353	VCEAPF1CN476M	ELEC C 47UF 20% 16V	S	AA	AA
C 1354	VCEAPF1CN476M	ELEC C 47UF 20% 16V	S	AA	AA
C 1355	VCEASX0JN476M	ELEC C 47UF 6,3V MVL6,3VC47ME60E1	S	AA	AA
C 1356	VCEASN1HN225M	ELEC C 2,2UF 20% 50V MKA50VC2R2MD55	S	AA	AA
C 1357	VCEASN1HN105M	ELEC C 1UF 20% 50V MKA50VC1MD55	S	AA	AA
C 1358	VCEASN1HN225M	ELEC C 2,2UF 20% 50V MKA50VC2R2MD55	S	AA	AA
C 1362	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1363	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1366	VCKYPA1HB681K	CERAM C 680PF 10% 50V	S	AA	AA
C 1367	VCKYPA1HB681K	CERAM C 680PF 10% 50V	S	AA	AA
C 1402	VCCCCY1HH391J	CAPACITOR GRM39CK 391J 50 (1608)SMD	S	AA	AA
C 1403	VCCCCY1HH391J	CAPACITOR GRM39CK 391J 50 (1608)SMD	S	AA	AA
C 1404	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1405	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1406	VCCCCY1HH221J	CAPACITOR GRM39CK 221J 50 (1608)SMD	S	AA	AA
C 1407	VCCCCY1HH221J	CAPACITOR GRM39CK 221J 50 (1608)SMD	S	AA	AA
C 1408	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1409	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1410	VCCCCY1HH331J	CAPACITOR GRM39CK 331J 50 (1608)SMD	S	AA	AA
C 1411	VCCCCY1HH331J	CAPACITOR GRM39CK 331J 50 (1608)SMD	S	AA	AA
C 1412	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1413	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1414	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1415	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1416	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1417	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1418	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1419	VCKYTV1EB474K	CERAM C 470NF 25V 2125SMD	S	AA	AA
C 1420	VCKYTV1EB474K	CERAM C 470NF 25V 2125SMD	S	AA	AA
C 1421	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1422	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1423	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1424	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1425	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1426	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1427	VCEAPF1CN226M	ELEC C 22UF 20% 16V	S	AA	AA
C 1429	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1430	VCEAPF1CN226M	ELEC C 22UF 20% 16V	S	AA	AA
C 1439	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1440	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1441	VCKYCY1CF334Z	CAPACITOR GRM39F 334Z 16 (1608)SMD	S	AA	AA
C 1442	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1443	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1444	VCKYCY1CF334Z	CAPACITOR GRM39F 334Z 16 (1608)SMD	S	AA	AA
C 1445	VCCCCY1HH391J	CAPACITOR GRM39CK 391J 50 (1608)SMD	S	AA	AA
C 1446	VCCCCY1HH391J	CAPACITOR GRM39CK 391J 50 (1608)SMD	S	AA	AA
C 1447	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1448	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1449	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1450	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1451	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1452	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 1461	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1462	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1463	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1464	RC-KZ0075TAZZ	CERAM C 2,2UF 16V GRM42-06B225K16PT	S	AA	AA
C 1465	VCCCCY1HH391J	CAPACITOR GRM39CK 391J 50 (1608)SMD	S	AA	AA
C 1466	VCCCCY1HH391J	CAPACITOR GRM39CK 391J 50 (1608)SMD	S	AA	AA
C 1467	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1470	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1472	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1476	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1501	VCKYCY1CB683K	CAPACITOR GRM39B 683K 16 (1608)SMD	S	AA	AA
C 1502	VCKYCY1CB473K	S.CHIP CAP 0.047UF/16V T	S	AA	AA
C 1601	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1602	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1603	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1604	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1804	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1805	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1806	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1807	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1808	VCEASN1EN475M	ELEC C 4,7UF 20% 25V MKA25VC4R7MD55	S	AA	AA
C 1809	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1810	VCEAPF1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 1814	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1815	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1816	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1817	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1819	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1820	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1821	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1822	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 1823	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1824	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1826	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1828	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1830	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1831	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1832	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
C 1833	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1834	VCEASH0JN108M	ELEC C 1000UF 20% 6,3V	S	AA	AC
C 1835	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1838	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1839	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1840	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1842	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 1858	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1859	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 1860	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
C 2201	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2202	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2203	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2204	VCCCCY1HH180J	CAPACITOR GRM39CK 180J 50 (1608)SMD	S	AA	AA
C 2205	VCCCCY1HH180J	CAPACITOR GRM39CK 180J 50 (1608)SMD	S	AA	AA
C 2206	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2207	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2208	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2209	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2210	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2211	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2212	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2213	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2214	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2215	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2216	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2217	RC-KZ0117TAZZ	CERAM C 4,7UF 6,3V GRM40-034B475K6,3PT	S	AA	AA
C 2218	RC-KZ0117TAZZ	CERAM C 4,7UF 6,3V GRM40-034B475K6,3PT	S	AA	AA
C 2219	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2220	RC-KZ0117TAZZ	CERAM C 4,7UF 6,3V GRM40-034B475K6,3PT	S	AA	AA
C 2221	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2222	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2223	VCKYCY1HB392K	CAPACITOR GRM39B 392K 50 (1608)SMD	S	AA	AA
C 2224	VCKYCY1HF393Z	CAPACITOR GRM39F 393Z 50 (1608)SMD	S	AA	AA
C 2225	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2226	RC-KZ0117TAZZ	CERAM C 4,7UF 6,3V GRM40-034B475K6,3PT	S	AA	AA
C 2227	VCKYCY1AB105K	CAPACITOR GRM39B 105K 10 (1608)SMD	S	AA	AA
C 2228	RC-KZ0117TAZZ	CERAM C 4,7UF 6,3V GRM40-034B475K6,3PT	S	AA	AA
C 2229	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2230	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2231	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2232	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2233	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2234	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
C 2235	VCCCCY1HH120J	S. CHIP CAP 12PF/50V TAPED	S	AA	AA
C 2236	VCCCCY1HH120J	S. CHIP CAP 12PF/50V TAPED	S	AA	AA
C 2237	VCCCCY1HH120J	S. CHIP CAP 12PF/50V TAPED	S	AA	AA
C 2238	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2239	VCCCCY1HH560J	CAPACITOR GRM39CK 560J 50 (1608)SMD	S	AA	AA
C 2240	VCCCCY1HH560J	CAPACITOR GRM39CK 560J 50 (1608)SMD	S	AA	AA
C 2241	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 2242	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2243	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2248	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2251	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 2252	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 2253	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2255	VCKYCY1HB222K	CAPACITOR GRM39B 222K 50 (1608)SMD	S	AA	AA
C 2256	VCKYCY1HB222K	CAPACITOR GRM39B 222K 50 (1608)SMD	S	AA	AA
C 2257	VCKYCY1HB222K	CAPACITOR GRM39B 222K 50 (1608)SMD	S	AA	AA
C 2258	VCEASH0JN477M	ELEC C 470UF 20% 6,3V CV-AX-A2	S	AA	AC
C 2259	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 2264	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 2265	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 2266	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2267	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2268	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2269	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2270	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2271	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 2272	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 2273	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 2274	VCKYCY1HF103Z	CHIP CAP 0.01UF/50V	S	AA	AA
C 2275	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2276	VCEASX1CN476M	ELEC C 47UF 16V MVL16VC47MF60E1	S	AA	AB
C 2277	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 2284	VCCCCY1HH150J	CAPACITOR GRM39CK 150J 50 (1608)	S	AA	AA
C 2285	VCEA4A1CN107M	ELEC C 100UF 20% 16V	S	AA	AA
C 2286	VCEA4A1VN476M	ELEC C 47UF 20% 35V	S	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
C 2287	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 2288	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
C 2801	VCKYCY1CF224Z	CAPACITOR GRM39F 224Z 16 (1608)SMD	S	AA	AA
C 2802	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6001	RC-KZA043WJZZ	CERAM C 10UF 6,3V GRM21BB10J106ME01L	S	AA	AB
C 6064	VCEAPF1CN106M	ELEC C 10UF 20% 16V	S	AA	AA
C 6108	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6109	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6110	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6111	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6112	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6113	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6114	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6115	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6116	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6118	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6120	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6121	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6122	RC-KZA043WJZZ	CERAM C 10UF 6,3V GRM21BB10J106ME01L	S	AA	AB
C 6123	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6124	VCCCCY1HH220J	CAPACITOR GRM39CK 220J 50 (1608)SMD	S	AA	AA
C 6125	VCCCCY1HH220J	CAPACITOR GRM39CK 220J 50 (1608)SMD	S	AA	AA
C 6126	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6127	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6128	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6129	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6130	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6131	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6132	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6133	VCKYCY1EF104Z	CAPACITOR GRM39F 104Z 25 (1608)SMD	S	AA	AA
C 6137	VCCCCY1HH181J	CAPACITOR GRM39CK 181J 50 (1608)SMD	S	AA	AA
C 6138	VCCCCY1HH181J	CAPACITOR GRM39CK 181J 50 (1608)SMD	S	AA	AA
C 6139	VCCCCY1HH181J	CAPACITOR GRM39CK 181J 50 (1608)SMD	S	AA	AA
	RESISTORS				
R 0705	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1002	VRS-CY1JF152J	S. CHIP RES. 1.5K-OHM	S	AA	AA
R 1003	VRS-CY1JF152J	S. CHIP RES. 1.5K-OHM	S	AA	AA
R 1004	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 1005	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 1006	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1007	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1008	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1009	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 1010	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1011	VRS-CY1JF105J	RES 0603 1MOHM 5% 1/10W SMD	S	AA	AA
R 1012	VRS-CY1JF222J	RES 0603 2,2KOHM 5% 1/10W SMD	S	AA	AA
R 1013	VRS-CY1JF152J	S. CHIP RES. 1.5K-OHM	S	AA	AA
R 1014	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 1015	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 1016	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1017	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1018	VRS-CA1JF220J	RES 22 OHM 5% 1/16W SMD	S	AA	AA
R 1020	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1026	VRS-CY1JF682J	RES 0603 6,8KOHM 5% 1/10W SMD	S	AA	AA
R 1027	VRS-CY1JF273J	S. CHIP RES. 27-OHM TAPED	S	AA	AA
R 1028	VRS-CY1JF682J	RES 0603 6,8KOHM 5% 1/10W SMD	S	AA	AA
R 1029	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1030	VRS-CY1JF682J	RES 0603 6,8KOHM 5% 1/10W SMD	S	AA	AA
R 1032	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1033	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1034	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1035	VRS-CY1JF681J	RES 0603 680 OHM 5% 1/10W SMD	S	AA	AA
R 1036	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 1037	VRS-TQ2BD101J	RES OX 100 OHM 5% 1/8W SMD	S	AA	AA
R 1038	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 1039	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1040	VRS-CY1JF392J	RES 0603 3,9KOHM 5% 1/10W SMD	S	AA	AA
R 1201	VRS-CY1JF682J	RES 0603 6,8KOHM 5% 1/10W SMD	S	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R 1202	VRS-CY1JF512J	RES 0603 5,1KOHM 5% 1/10W SMD	S	AA	AA
R 1210	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1211	VRS-CY1JF821J	RES 0603 820 OHM 5% 1/10W SMD	S	AA	AA
R 1212	VRS-CY1JF681J	RES 0603 680 OHM 5% 1/10W SMD	S	AA	AA
R 1213	VRS-CY1JF222J	RES 0603 2,2KOHM 5% 1/10W SMD	S	AA	AA
R 1214	VRS-CY1JF331J	RES 0603 330 OHM 5% 1/10W SMD	S	AA	AA
R 1215	VRS-TQ2BD220J	OX RES 22 OHM 5% 1/8W SMD	S	AA	AA
R 1216	VRS-CY1JF391J	RES 0603 390 OHM 5% 1/10W SMD	S	AA	AA
R 1217	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 1218	VRS-CY1JF122J	RES 0603 1,2KOHM 5% 1/10W SMD	S	AA	AA
R 1219	VRS-CY1JF680J	RES 0603 68 OHM 5% 1/10W SMD	S	AA	AA
R 1301	VRS-TQ2BD220J	OX RES 22 OHM 5% 1/8W SMD	S	AA	AA
R 1302	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1303	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1305	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 1306	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 1307	VRS-TW2ED100J	RES MCR25 10 OHM 5% 1/4W SMD	S	AA	AA
R 1308	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 1309	VRS-TW2ED100J	RES MCR25 10 OHM 5% 1/4W SMD	S	AA	AA
R 1310	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 1312	VRS-CY1JF822F	RES 0603 8,2KOHM 1% 1/10W SMD	S	AA	AA
R 1313	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1314	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1315	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1316	VRS-CY1JF105J	RES 0603 1MOHM 5% 1/10W SMD	S	AA	AA
R 1317	VRS-CY1JF105J	RES 0603 1MOHM 5% 1/10W SMD	S	AA	AA
R 1318	VRS-CY1JF100J	RES 0603 10 OHM 5% 1/10W SMD	S	AA	AA
R 1351	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 1352	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 1354	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA
R 1355	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA
R 1356	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1357	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1358	VRS-CY1JF472J	RES 0603 4,7KOHM 5% 1/10W SMD	S	AA	AA
R 1362	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
R 1363	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
R 1364	VRS-CY1JF222J	RES 0603 2,2KOHM 5% 1/10W SMD	S	AA	AA
R 1365	VRS-CY1JF105J	RES 0603 1MOHM 5% 1/10W SMD	S	AA	AA
R 1402	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1403	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1404	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1405	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1406	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1407	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1408	VRS-CY1JF562J	RES 0603 5,6KOHM 5% 1/10W SMD	S	AA	AA
R 1409	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 1410	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1411	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1412	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1413	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1414	VRS-CY1JF271J	S.CHIP RESIS. 270OHM TAPED	S	AA	AA
R 1415	VRS-CY1JF271J	S.CHIP RESIS. 270OHM TAPED	S	AA	AA
R 1416	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1417	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1418	VRS-CY1JF183J	RES 0603 18KOHM 5% 1/10W SMD	S	AA	AA
R 1419	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 1420	VRS-CY1JF105J	RES 0603 1MOHM 5% 1/10W SMD	S	AA	AA
R 1421	VRS-CY1JF105J	RES 0603 1MOHM 5% 1/10W SMD	S	AA	AA
R 1422	VRS-CY1JF563J	RES 0603 56KOHM 5% 1/10W SMD	S	AA	AA
R 1423	VRS-CY1JF563J	RES 0603 56KOHM 5% 1/10W SMD	S	AA	AA
R 1424	VRS-CY1JF563J	RES 0603 56KOHM 5% 1/10W SMD	S	AA	AA
R 1425	VRS-CY1JF563J	RES 0603 56KOHM 5% 1/10W SMD	S	AA	AA
R 1426	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1427	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1428	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1429	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1430	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1431	VRS-CY1JF183J	RES 0603 18KOHM 5% 1/10W SMD	S	AA	AA
R 1432	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
R 1433	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
R 1434	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1436	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1437	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1438	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1439	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1440	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1441	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1442	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1443	VRS-CY1JF183J	RES 0603 18KOHM 5% 1/10W SMD	S	AA	AA
R 1444	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1445	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 1446	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
R 1447	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
R 1448	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1451	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1452	VRS-CJ1JF104J	RES MNR12 100KOHM 5% 1/16W SMD	S	AA	AA
R 1453	VRS-CJ1JF104J	RES MNR12 100KOHM 5% 1/16W SMD	S	AA	AA
R 1454	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1456	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1457	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1458	VRS-CY1JF562J	RES 0603 5,6KOHM 5% 1/10W SMD	S	AA	AA
R 1459	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 1460	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1461	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1462	VRS-CY1JF271J	S.CHIP RESIS. 270OHM TAPED	S	AA	AA
R 1463	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1464	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 1465	VRS-CY1JF271J	S.CHIP RESIS. 270OHM TAPED	S	AA	AA
R 1466	VRS-CY1JF472J	RES 0603 4,7KOHM 5% 1/10W SMD	S	AA	AA
R 1467	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1479	VRS-CJ1JF104J	RES MNR12 100KOHM 5% 1/16W SMD	S	AA	AA
R 1483	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1501	VRS-CY1JF682J	RES 0603 6,8KOHM 5% 1/10W SMD	S	AA	AA
R 1502	VRS-CY1JF682J	RES 0603 6,8KOHM 5% 1/10W SMD	S	AA	AA
R 1601	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1801	VRS-CY1JF821J	RES 0603 820 OHM 5% 1/10W SMD	S	AA	AA
R 1802	VRS-CY1JF220J	RES 0603 22 OHM 5% 1/10W SMD	S	AA	AA
R 1803	VRS-CY1JF330J	RES 0603 33 OHM 5% 1/10W SMD	S	AA	AA
R 1804	VRS-CY1JF330J	RES 0603 33 OHM 5% 1/10W SMD	S	AA	AA
R 1805	VRS-CY1JF330J	RES 0603 33 OHM 5% 1/10W SMD	S	AA	AA
R 1806	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
R 1807	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
R 1808	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
R 1809	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1810	VRS-CY1JF122J	RES 0603 1,2KOHM 5% 1/10W SMD	S	AA	AA
R 1811	VRS-CY1JF271J	S.CHIP RESIS. 270OHM TAPED	S	AA	AA
R 1812	VRS-CY1JF222J	RES 0603 2,2KOHM 5% 1/10W SMD	S	AA	AA
R 1813	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 1814	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 1815	VRS-CY1JF331J	RES 0603 330 OHM 5% 1/10W SMD	S	AA	AA
R 1816	VRS-CY1JF331J	RES 0603 330 OHM 5% 1/10W SMD	S	AA	AA
R 1817	VRS-CY1JF331J	RES 0603 330 OHM 5% 1/10W SMD	S	AA	AA
R 1821	VRS-TQ2BD101J	RES OX 100 OHM 5% 1/8W SMD	S	AA	AA
R 1822	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1823	VRS-CB1JF220J	RES 22 OHM 5% 1/16W SMD	S	AA	AA
R 1824	VRS-CB1JF220J	RES 22 OHM 5% 1/16W SMD	S	AA	AA
R 1825	VRS-CY1JF222J	RES 0603 2,2KOHM 5% 1/10W SMD	S	AA	AA
R 1826	VRS-CY1JF103J	RES 0603 10KOHM 5% 1/10W SMD	S	AA	AA
R 1827	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 1828	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA
R 1829	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA
R 1830	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1831	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1832	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1837	VRS-CY1JF220J	RES 0603 22 OHM 5% 1/10W SMD	S	AA	AA
R 1838	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1839	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1840	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R 1850	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1851	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 1852	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 2201	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 2202	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 2203	VRS-CY1JF155J	RES 0603 1,5MOHM 5% 1/10W SMD	S	AA	AA
R 2204	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 2210	VRS-CY1JF750J	S CHIP RESISTOR 75 OHM	S	AA	AA
R 2212	VRS-CY1JF750J	S CHIP RESISTOR 75 OHM	S	AA	AA
R 2216	VRS-CB1JF101J	RES 100 OHM 5% 1/16W SMD	S	AA	AA
R 2217	VRS-CB1JF101J	RES 100 OHM 5% 1/16W SMD	S	AA	AA
R 2218	VRS-CJ1JF101J	RES MNR12 100 OHM 5% 1/16W SMD	S	AA	AA
R 2219	VRS-CJ1JF101J	RES MNR12 100 OHM 5% 1/16W SMD	S	AA	AA
R 2220	VRS-CJ1JF101J	RES MNR12 100 OHM 5% 1/16W SMD	S	AA	AA
R 2221	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2222	VRS-CJ1JF101J	RES MNR12 100 OHM 5% 1/16W SMD	S	AA	AA
R 2223	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2224	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2225	VRS-CJ1JF101J	RES MNR12 100 OHM 5% 1/16W SMD	S	AA	AA
R 2226	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2227	VRS-CH1JF680J	RES MNR14 68 OHM 5% 1/16W SMD	S	AA	AA
R 2228	VRS-CJ1JF101J	RES MNR12 100 OHM 5% 1/16W SMD	S	AA	AA
R 2229	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2230	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2231	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2232	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2233	VRS-CH1JF101J	RES MNR14 100 OHM 5% 1/16W SMD	S	AA	AA
R 2242	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 2243	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
R 2253	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 2254	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 2255	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 2256	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 2257	VRS-TQ2BD750J	OX RES 75 OHM 5% 1/8W SMD	S	AA	AA
R 2258	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 2259	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 2260	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 2261	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 2801	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 2802	VRS-CY1JF332J	RES 0603 3,3KOHM 5% 1/10W SMD	S	AA	AA
R 2803	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA
R 2804	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA
R 2805	VRS-CY1JF102F	CHIP RESISTOR 1% 1K	S	AA	AA
R 2806	VRS-CY1JF102F	CHIP RESISTOR 1% 1K	S	AA	AA
R 2807	VRS-CY1JF750J	S CHIP RESISTOR 75 OHM	S	AA	AA
R 2808	VRS-CY1JF750J	S CHIP RESISTOR 75 OHM	S	AA	AA
R 6001	VRN-VV3DB3R3J	MET FILM R 3.3 OHM 5% 2W	S	AA	AA
	MISCELLANEOUS PARTS				
	LHLDWA048WJKZ	WIRE HOLDER	S	AA	AA
	LX-BZ3370CEF7	SCREW	S	AA	AA
	PMLT-A179WJZZ	MOLTPLANE	S	AC	AH
	PMLT-A193WJZZ	MOLTPLANE	S	AA	AD
	PRDARA173WJFW	HEAT SINK	S	AA	AC
	PSLDMA538WJFW	QS-B SHIELD CASE	S	AA	AD
	PSLDMA568WJFW	SHIELD CASE	S	AC	AG
	QEARPA149WJFW	EARTH	S	AA	AC
	VW7UGB0-020AA	VINYL W 20MM	S	AA	AA
F 1001	QFS-LA011WJZZ	FUSE FHC16 252AB-TP	S	AA	AB
F 2203	RBLN-A029WJZZ	BALUNE BLM18BB600SN1D	S	AA	AA
F 2204	RBLN-A029WJZZ	BALUNE BLM18BB600SN1D	S	AA	AA
F 2206	RBLN-A029WJZZ	BALUNE BLM18BB600SN1D	S	AA	AA
F 2207	RBLN-A029WJZZ	BALUNE BLM18BB600SN1D	S	AA	AA
F 2208	RBLN-A029WJZZ	BALUNE BLM18BB600SN1D	S	AA	AA
F 2209	RBLN-A029WJZZ	BALUNE BLM18BB600SN1D	S	AA	AA
FB 1001	RBLN-0065CEZZ	FERRITE BLM41AF800SN1L	S	AA	AA
FB 1301	RBLN-0083GEZZ	BALUNE BLM18DB221SN1D	S	AA	AA
FB 1302	RBLN-0083GEZZ	BALUNE BLM18DB221SN1D	S	AA	AA
FB 1320	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
FB 2201	RBLN-0080TAZZ	BALUNE BLM15AG121PN1D	S	AA	AA
FB 2203	RBLN-0080TAZZ	BALUNE BLM15AG121PN1D	S	AA	AA
FB 2205	RBLN-0080TAZZ	BALUNE BLM15AG121PN1D	S	AA	AA
FB 2206	RBLN-A005WJZZ	FERRITE BLM18BB470SN1D	S	AA	AA
FB 2207	RBLN-A005WJZZ	FERRITE BLM18BB470SN1D	S	AA	AA
FB 2210	RBLN-0251TAZZ	FERRITE BLM41PG471SN1L MURATA	S	AA	AB
FB 2211	RBLN-0251TAZZ	FERRITE BLM41PG471SN1L MURATA	S	AA	AB
J 0002	VW7UGB2-020AA	20MM WIRE	S	AA	AA
J 0003	VW7UGB2-020AA	20MM WIRE	S	AA	AA
J 0004	VW7UGB2-020AA	20MM WIRE	S	AA	AA
J 0005	VW7UGB5-070AA	VINYL WIRE 70MM	S	AA	AA
J 0010	VRS-TV1JD000J	RES 2125 0 OHM 5% 1/10W SMD	S	AA	AA
J 0011	VRS-TV1JD000J	RES 2125 0 OHM 5% 1/10W SMD	S	AA	AA
J 0401	QJAKGA069WJZZ	PIN JACK LPR6520-E720FM	S	AB	AE
J 0402	QJAKJA011WJZZ	STACKED JACK ST-4235-3/5N KYCON	S	AD	AL
J 0403	QSOCDA030WJZZ	SOCKET MDC-294-298 POWER DYNA	S	AC	AG
JF 0001	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 0002	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 0010	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 0011	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 0013	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 0014	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 0017	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 0027	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1001	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1002	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1003	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1004	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1005	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1006	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1007	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1008	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1009	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1010	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1013	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1203	VRS-TQ2BD000J	OX RES 0 OHM 5% 1/8W SMD	S	AA	AA
JF 1301	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1401	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1407	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1408	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1409	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1413	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1414	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1415	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1804	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1805	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1806	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 1807	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2215	VHDHSU119//-1	DIODE HSU119TRF	S	AA	AB
JF 2230	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2231	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2232	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2233	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2234	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2235	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2247	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2250	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
JF 2251	VCCCCY1HH101J	CAPACITOR GRM39CK 101J 50 (1608)SMD	S	AA	AA
JF 2253	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 2254	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
JF 6101	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
LUG1701	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB
LUG1702	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB
LUG1703	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB
LUG1704	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB
LUG1705	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1706	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1707	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1708	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
LUG1709	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB
LUG1710	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1711	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1712	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1713	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1714	QLUGZA002WJZZ	SHIELD CLIP SD00919-31	S	AA	AB
LUG1715	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB
P 1001	QPLGN0778GEZZ	PLUG 7-PIN (NLA)	S	AA	AA
P 1002	QCNCM2645SC0F	CONNECTOR	S	AA	AA
P 1003	QCNCM0217FCZZ	CONNECTOR B13B-EH-1	S	AA	AB
P 1004	QPLGN0720REZZ	CONNECTOR B07B-ZR JST	S	AA	AB
P 1006	QPLGN0678GEZZ	PLUG 6 VIAS (JST)	S	AA	AA
P 1301	QPLGN0441CEZZ	CONECTOR B4B-EH	S	AA	AA
P 1401	QPLGN0741CEZZ	CONNECTOR B7B-EH	S	AA	AA
P 2201	QPLGN0541CEZZ	PLUG B5B-EH	S	AA	AA
P 2205	QPLGN1041CEZZ	PLUG	S	AA	AB
P 2206	QPLGNA047WJZZ	CONNECTOR B08B-PASK-1	S	AA	AB
SC 1451	QSOCZA056WJZZ	SOCKET CSS5021-2430F	S	AA	AE
SC 1452	QSOCZA056WJZZ	SOCKET CSS5021-2430F	S	AA	AE
SC 2201	QSOCN0491FJZZ	SOCKET FH12-33S-0,5SV	S	AA	AD
SC 2801	QPLGNA353WJZZ	CONNECTOR KEY-15S-2A3A JST	S	AD	AK
SF 1201	RFILCA025WJZZ	SAW FILTER X6874D EPCOS	S	AC	AH
TU 1201	RTUNQA016WJZZ	TUNER UR1316/AIH-3	S	AM	AY
PWB-B		**OPERATION UNIT**			
	DIODES				
D 4050	RH-EX1271CEZZ	ZENER DIODE HZU12B2TRF HITACHI	S	AA	AA
D 4051	RH-EX1271CEZZ	ZENER DIODE HZU12B2TRF HITACHI	S	AA	AA
	RESISTORS				
R 4050	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 4051	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
R 4053	VRS-CY1JF681J	RES 0603 680 OHM 5% 1/10W SMD	S	AA	AA
	MISCELLANEOUS PARTS				
JF 4001	VRS-CY1JF000J	RESISTOR 0 OHM	S	AA	AA
P 4050	QPLGN0480GEZZ	PLUG 4-PIN S04B-PH-K-S	S	AA	AA
S 4057	QSW-P0560CEZZ	SWITCH	S	AB	AF
SW 4051	QSW-K0095CEZZ	SWITCH SKHHNUA010	S	AA	AC
SW 4052	QSW-K0095CEZZ	SWITCH SKHHNUA010	S	AA	AC
SW 4053	QSW-K0095CEZZ	SWITCH SKHHNUA010	S	AA	AC
SW 4054	QSW-K0095CEZZ	SWITCH SKHHNUA010	S	AA	AC
SW 4055	QSW-K0095CEZZ	SWITCH SKHHNUA010	S	AA	AC
PWB-C		**R/C - LED UNIT**			
	INTEGRATED CIRCUITS				
IC 4001	RH-IXB304WJZZ	IC 74HC4094D,653 PHILIPS	S	AA	AD
IC 4002	VHITPS850++-1	IC TPS850	S	AC	AG
IC 4003	VHILM393A//-1	IC LM393APSR	S	AA	AD
	TRANSISTORS				
Q 4001	VSDTA143EKA-1	TRT DTA143EKA-T146	S	AA	AA
Q 4002	VSDTA143EKA-1	TRT DTA143EKA-T146	S	AA	AA
Q 4003	VSDTA143EKA-1	TRT DTA143EKA-T146	S	AA	AA
Q 4004	VSDTA143EKA-1	TRT DTA143EKA-T146	S	AA	AA
	DIODES				
D 4001	RH-PX0421CEZZ	LED DIODO CL-165HR/YG-D-A1 CITIZEN	S	AA	AB
D 4002	RH-PX0419CEZZ	LED DIODE SML-010LTT86-A1	S	AA	AB
D 4003	RH-PX0198TAZZ	LED DIODE PG1111C-430-TR-A	S	AA	AB
D 4005	RH-EX1271CEZZ	ZENER DIODE HZU12B2TRF HITACHI	S	AA	AA
	CAPACITORS				
C 4001	RC-KZ0117TAZZ	CERAM C 4,7UF 6,3V GRM40-034B475K6,3PT	S	AA	AA
C 4002	VCKYCY1HF104Z	CAPACITOR GRM39F 104Z 50 (1608)SMD	S	AA	AA
C 4003	VCEAPF1CW106M	ELEC C 10UF 20% 16V	S	AA	AA
C 4004	VCKYCY1HF104Z	CAPACITOR GRM39F 104Z 50 (1608)SMD	S	AA	AA
C 4005	VCKYCY1AB224K	CAPACITOR GRM39B 224K 10 (1608)SMD	S	AA	AA
	RESISTORS				

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R 4001	VRS-CY1JF391J	RES 0603 390 OHM 5% 1/10W SMD	S	AA	AA
R 4002	VRS-CY1JF121J	SURFACE MOUNT CHIP RESISTOR 120 OHM	S	AA	AA
R 4003	VRS-CY1JF391J	RES 0603 390 OHM 5% 1/10W SMD	S	AA	AA
R 4006	VRS-CY1JF101J	RES 0603 100 OHM 5% 1/10W SMD	S	AA	AA
R 4007	VRS-CY1JF121J	SURFACE MOUNT CHIP RESISTOR 120 OHM	S	AA	AA
R 4008	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 4009	VRS-CY1JF223J	RES 0603 22KOHM 5% 1/10W SMD	S	AA	AA
R 4010	VRS-CY1JF472J	RES 0603 4,7KOHM 5% 1/10W SMD	S	AA	AA
R 4011	VRS-CY1JF561J	RES 0603 560 OHM 5% 1/10W SMD	S	AA	AA
R 4012	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 4014	VRS-CY1JF272J	S. CHIP RES. 2.7K-OHM TAPED	S	AA	AA
R 4015	VRS-CY1JF123J	RES 0603 12KOHM 5% 1/10W SMD	S	AA	AA
R 4016	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
R 4017	VRS-CY1JF473J	RES 0603 47KOHM 5% 1/10W SMD	S	AA	AA
R 4018	VRS-CY1JF102J	RES 0603 1KOHM 5% 1/10W SMD	S	AA	AA
	MISCELLANEOUS PARTS				
P 4001	QPLGN0780GEZZ	PLUG 7-PIN (NLA)	S	AA	AA
RMC4001	RRMCUA034WJQZ	R/C RECEIVER GP1UW261RK0F	S	AB	AE
PWB-D		**LCD CONTROL UNIT**			
	INTEGRATED CIRCUITS				
IC2001	VHiBD4742G+-1Y	BD4742G-TR	J	AD	AD
IC2004	RH-iXA870WJZZQ	HD64F3687H	J	AY	AY
IC2006	VHiT7SET32U-1Y	TC7SET32FU	J	AD	AD
IC2008	VHiBR24L08F-1Y	BR24L08F-WE2	J	AE	AE
IC2010	VHiM62392FP-1Y	M62392FP	J	AM	AM
IC2016	VHiLVX125FT-1Y	TC74LVX125FT	J	AG	AG
IC2017	VHiLVX125FT-1Y	TC74LVX125FT	J	AG	AG
IC2019	VHiLVX125FT-1Y	TC74LVX125FT	J	AG	AG
IC4101	RH-iXA706WJZZQ	IR3E12M1	J	AN	AN
IC4102	VHiNJM4580V-1Y	NJM4580V	J	AE	AE
IC4107	VHiLP2951CM-1Y	LP2951CMX	J	AL	AL
IC4108	VHiPQ1CZ41H-1Y	PQ1CZ41H2ZP	J	AG	AG
IC4109	VHiLT1615ES-1Y	LT1615ES5	J	AP	AP
IC4114	VHiLT1617ES-1Y	LT1617ES5	J	AP	AP
IC4116	VHiLTC1872+-1Y	LTC1872ES6	J	AR	AR
IC4501	RH-iXB003WJZZQ	LR38878	J	BB	BB
IC4601	RH-iXB001WJZZQ	LR38879	J	BD	BD
IC4602	RH-iXB272WJZZY	25LC640-I/SN	J		
IC4603	VHiT7WH123U-1Y	TC7WH123FU	J	AD	AD
IC4901	RH-iXB002WJZZQ	KZ4E064311TFP	J	BB	BB
IC4902	RH-iXA986WJZZQ	MS81V2600-12TB	J	BB	BB
IC4903	RH-iXB243WJZZY	25LC320-I/SN (LC-26GA5E)	J	AL	AL
IC4903	RH-iXB242WJZZY	25LC320-I/SN (LC-32GA5E)	J	AL	AL
IC7704	VHiPQ033EZ1-1Y	PQ033EZ01ZP	J	AF	AF
IC7706	VHiPQ033EZ1-1Y	PQ033EZ01ZP	J	AF	AF
IC7708	VHiPQ1L503M-1Y	PQ1L503M2SP	J	AD	AD
IC7709	VHiBD4742G+-1Y	BD4742G-TR	J	AD	AD
IC7711	VHiPQ1CZ21H-1Y	PQ1CZ21H2ZP	J	AH	AH
	TRANSISTORS				
Q2002	VSDTC144EE/-1Y	DTC144EE	J	AA	AA
Q2003	VSDTC144EE/-1Y	DTC144EE	J	AA	AA
Q2004	VSDTC144EE/-1Y	DTC144EE	J	AA	AA
Q2011	VSDTC144EE/-1Y	DTC144EE	J	AA	AA
Q2012	VSDTC144EE/-1Y	DTC144EE	J	AA	AA
Q2013	VS2SK536///-1Y	2SK536	J	AE	AE
Q2014	VS2SK536///-1Y	2SK536	J	AE	AE
Q2015	VSDTC144EE/-1Y	DTC144EE	J	AA	AA
Q2016	VSDTC144EE/-1Y	DTC144EE	J	AA	AA
Q4101	VS2SD1664Q+-1Y	2SD1664Q+	J	AC	AC
Q4103	VS2SA1530AR-1Y	2SA1530AR	J	AB	AB
Q4104	VS2SC3928AR-1Y	2SC3928AR	J	AB	AB
Q4105	VSTP0610T++-1Y	TP0610T++	J	AD	AD
Q4106	VS2SC3928AR-1Y	2SC3928AR	J	AB	AB
Q4108	VS2SK1826++-1Y	2SK1826++	J	AC	AC
Q4109	VS2SK1826++-1Y	2SK1826++	J	AC	AC
Q4110	VSSi4884DY+-1Y	SI4884DY-T1	J	AG	AG

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
Q4112	VS2SB1132Q/-1Y	2SB1132Q	J	AC	AC
Q7701	VSDTC114EE/-1Y	DTC114EE	J	AB	AB
	DIODES				
D2004	VHDMA157A//-1Y	MA157A	J	AC	AC
D2005	VHD1SS355//-1Y	1SS355	J	AB	AB
D4101	VHDHSU119//-1Y	HSU119	J	AB	AB
D4102	VHDLi124+++-1Y	Li124+++	J	AC	AC
D4103	VHDHSU119//-1Y	HSU119	J	AB	AB
D4104	VHDHSU119//-1Y	HSU119	J	AB	AB
D4105	VHDLi114+++-1Y	Li114+++	J	AC	AC
D4106	RH-EX1274CEZZY	Zener Diode, 13V	J	AB	AB
D4107	VHDHSU119//-1Y	HSU119	J	AB	AB
D4108	VHDLi114+++-1Y	Li114+++	J	AC	AC
D4109	VHDLi124+++-1Y	Li124+++	J	AC	AC
D4110	VHDDA221///-1Y	DA221	J	AB	AB
D4501	VHDDAN222//-1Y	DAN222	J	AA	AA
D7705	VHDHSU119//-1Y	HSU119	J	AB	AB
D7707	VHDHSU119//-1Y	HSU119	J	AB	AB
D7712	VHDSC8024//-1Y	SC8024	J	AC	AC
D7713	VHDSC8024//-1Y	SC8024	J	AC	AC
D7714	VHDLi114+++-1Y	Li114+++	J	AC	AC
D7715	VHDDAN222//-1Y	DAN222	J	AA	AA
D7718	VHD1SS355//-1Y	1SS355	J	AB	AB
D7719	VHD1SS355//-1Y	1SS355	J	AB	AB
D7720	VHD1SS355//-1Y	1SS355	J	AB	AB
	PACKAGED CIRCUIT				
X2001	RCRSC0032TAZZY	Crystal, 32.768MHz	J	AG	AG
X4601	RCRUAA048WJZZY	Crystal, 83.565MHz	J		
	FILTERS AND COILS				
FL2001	RFiLZ0169TAZZY	Filter	J	AD	AD
FL4103	RFiLNA002WJZZY	Filter	J	AD	AD
FL4651	RFiLNA002WJZZY	Filter	J	AD	AD
FL4652	RFiLNA002WJZZY	Filter	J	AD	AD
FL4653	RFiLNA002WJZZY	Filter	J	AD	AD
FL4654	RFiLNA002WJZZY	Filter	J	AD	AD
L4101	RCiLP0343TAZZY	Coil 10uH	J	AD	AD
L4102	RCiLCA039WJZZY	Coil 68uH	J	AF	AF
L4103	RCiLP0355TAZZY	Coil 4.7uH	J	AD	AD
L4104	RCiLP0343TAZZY	Coil 10uH	J	AD	AD
L4105	VPD9M4R7J1R4NY	Peaking 4.7uH	J	AB	AB
L4106	RCiLPA001WJZZY	Coil 10uH	J	AF	AF
L4107	VPBWM220K1R2NY	Peaking 22uH	J	AC	AC
L4108	VPBWM220K1R2NY	Peaking 22uH	J	AC	AC
L4109	RCiLP0343TAZZY	Coil 10uH	J	AD	AD
L4110	VPD9M4R7J1R4NY	Peaking 4.7uH	J	AB	AB
L7701	RCiLP0343TAZZY	Coil 10uH	J	AD	AD
L7712	RCiLCA095WJZZY	Coil 470uH	J	AD	AD
L7713	RCiLP0343TAZZY	Coil 10uH	J	AD	AD
	CAPACITORS				
C2001	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2002	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2003	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2004	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2006	VCCCCY1HH220JY	22p 50V Ceramic	J	AA	AA
C2007	VCCCCY1HH220JY	22p 50V Ceramic	J	AA	AA
C2008	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2009	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C2010	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C2012	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C2013	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C2014	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2015	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2016	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2017	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2020	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C2021	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2022	VCEASY1CN107MY	100 16V Electrolytic	J	AC	AC
C2023	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2024	VCCCCY1HH102JY	1000p 50V Ceramic	J	AB	AB
C2025	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C2032	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2035	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C2036	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4101	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4102	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4103	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4106	RC-KZ0070TAZZY	4,7 16V Ceramic	J	AD	AD
C4108	RC-KZ0070TAZZY	4,7 16V Ceramic	J	AD	AD
C4109	VCCCCY1HH680JY	68p 50V Ceramic	J	AA	AA
C4110	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4112	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4114	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4115	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4116	RC-KZA047WJZZY	1 50V Ceramic	J	AC	AC
C4117	VCEASY1CN477MY	470 16V Electrolytic	J	AD	AD
C4119	VCAAPF1DJ226MY	22 20V Electrolytic	J	AF	AF
C4120	VCCCCY1HH5R0CY	5p 50V Ceramic	J	AA	AA
C4121	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4124	VCCCCY1HH680JY	68p 50V Ceramic	J	AA	AA
C4125	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4127	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4129	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4135	VCKYTV1CB105KY	1 16V Ceramic	J	AC	AC
C4136	VCAAPF1DJ226MY	22 20V Electrolytic	J	AF	AF
C4137	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4138	VCEASY1EN227MY	220 25V Electrolytic	J	AD	AD
C4139	VCKYTV1CB105KY	1 16V Ceramic	J	AC	AC
C4141	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4142	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4145	RC-KZ0070TAZZY	4,7 16V Ceramic	J	AD	AD
C4146	VCAAPF1CJ396MY	39 16V Electrolytic	J	AF	AF
C4147	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4153	RC-KZA097WJZZY	1 16V Ceramic	J	AD	AD
C4155	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4156	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4159	VCEASY1EN476MY	47 25V Electrolytic	J	AC	AC
C4160	VCEASY1HN106MY	10 50V Electrolytic	J	AC	AC
C4161	RC-KZ0070TAZZY	4,7 16V Ceramic	J	AD	AD
C4162	VCCCCY1HH391JY	390p 50V Ceramic	J	AB	AB
C4163	RC-KZA047WJZZY	1 50V Ceramic	J	AC	AC
C4164	VCKYCY1CF224ZY	0,22 16V Ceramic	J	AB	AB
C4165	VCCCCY1HH101JY	100p 50V Ceramic	J	AA	AA
C4166	VCCCCY1HH221JY	220p 50V Ceramic	J	AA	AA
C4168	RC-KZ0053TAZZY	10 10V Ceramic	J	AD	AD
C4169	VCAAPF1DJ396MY	39 20V Electrolytic	J	AF	AF
C4170	VCCCCY1HH101JY	100p 50V Ceramic	J	AA	AA
C4174	RC-KZ0053TAZZY	10 10V Ceramic	J	AD	AD
C4176	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4177	VCAAPF1DJ226MY	22 20V Electrolytic	J	AF	AF
C4179	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4180	VCEASY1EN227MY	220 25V Electrolytic	J	AD	AD
C4181	RC-KZ0070TAZZY	4,7 16V Ceramic	J	AD	AD
C4192	VCKYCY1HB152KY	1500p 50V Ceramic	J	AA	AA
C4195	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4196	VCEASX1VN226MY	22 35V Electrolytic	J	AC	AC
C4197	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4501	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4502	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4503	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4504	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4505	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4506	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4507	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4508	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4509	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
C4510	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4511	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4512	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4513	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4514	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4515	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4516	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4517	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4518	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4519	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4520	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4521	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4522	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4523	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4524	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4525	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4526	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4527	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4528	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4529	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4530	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4531	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4532	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4533	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4601	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4602	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4603	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4604	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4605	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4606	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4607	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4608	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4609	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4610	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4611	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4612	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4613	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4614	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4615	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4616	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4617	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4618	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4619	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4620	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4621	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4622	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4623	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4624	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4625	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4626	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4651	VCAAPF0JJ107MY	100 6.3V Electrolytic	J	AF	AF
C4652	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4653	VCAAPF1DJ226MY	22 20V Electrolytic	J	AF	AF
C4654	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4655	VCAAPF0JJ107MY	100 6.3V Electrolytic	J	AF	AF
C4656	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4657	VCAAPF1DJ226MY	22 20V Electrolytic	J	AF	AF
C4658	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4901	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4902	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4903	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4904	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4905	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4906	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4907	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4908	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4909	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4910	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4911	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4912	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4913	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4914	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4915	VCCCCY1HH331JY	330p 50V Ceramic	J	AA	AA
C4916	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4917	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4918	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4919	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4920	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4921	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4922	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4923	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4924	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4925	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4926	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4927	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4928	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4929	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4930	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4931	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C4932	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4933	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4934	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4935	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4936	VCEASY0JN107MY	100 6.3V Electrolytic	J	AC	AC
C4937	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4938	VCKYCY1HB102KY	1000p 50V Ceramic	J	AA	AA
C4939	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4940	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4941	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4942	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4943	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4944	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4945	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4946	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4947	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4948	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4949	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C4950	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4951	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4952	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C4953	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7701	VCEASY1CN107MY	100 16V Electrolytic	J	AC	AC
C7702	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7703	VCEASX1CN226MY	22 16V Electrolytic	J	AC	AC
C7704	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7707	VCEASY1CN226MY	22 16V Electrolytic	J	AC	AC
C7709	VCEASY1CN226MY	22 16V Electrolytic	J	AC	AC
C7713	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7715	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7723	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C7724	VCEASY0JN476MY	47 6.3V Electrolytic	J	AC	AC
C7725	VCKYCY1HB103KY	0,01 50V Ceramic	J	AA	AA
C7728	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7729	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7733	VCEASY1EN107MY	100 25V Electrolytic	J	AC	AC
C7734	VCCCCY1HH681JY	680p 50V Ceramic	J	AB	AB
C7735	VCEASY1CN477MY	470 16V Electrolytic	J	AD	AD
C7736	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
C7737	VCKYCY1EF104ZY	0,1 25V Ceramic	J	AA	AA
	RESISTORS				
R2001	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R2002	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2003	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2004	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2005	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2006	VRS-CJ1JF333JY	33k 1/16W Metal Oxide	J	AA	AA
R2007	VRS-CY1JF222FY	2.2k 1/16W Metal Oxide	J	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R2008	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2009	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2010	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2011	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R2013	VRS-CY1JF393JY	39k 1/16W Metal Oxide	J	AA	AA
R2014	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R2015	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2016	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R2016	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R2017	VRS-CY1JF394JY	390k 1/16W Metal Oxide	J	AA	AA
R2018	VRS-CY1JF106JY	10M 1/16W Metal Oxide	J	AA	AA
R2019	VRS-CY1JF105JY	1M 1/16W Metal Oxide	J	AA	AA
R2020	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2021	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2022	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2023	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R2024	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2025	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R2026	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2027	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2028	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2030	VRS-CY1JF473JY	47k 1/16W Metal Oxide	J	AA	AA
R2031	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2033	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2034	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2035	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R2036	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2037	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2038	VRS-CY1JF333JY	33k 1/16W Metal Oxide	J	AA	AA
R2040	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R2041	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2042	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2044	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R2045	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R2046	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R2048	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2049	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2050	VRS-CY1JF683JY	68k 1/16W Metal Oxide	J	AA	AA
R2052	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2053	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2054	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2056	VRS-CJ1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2058	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2059	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2060	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2061	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2063	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2064	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2065	VRS-CJ1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2066	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2067	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2068	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R2069	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2070	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2071	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2072	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2073	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2074	VRS-CY1JF473JY	47k 1/16W Metal Oxide	J	AA	AA
R2075	VRS-CY1JF222JY	2.2k 1/16W Metal Oxide	J	AA	AA
R2076	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2077	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2078	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2079	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2081	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2088	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2089	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2092	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R2093	VRS-CY1JF332JY	3.3k 1/16W Metal Oxide	J	AA	AA
R2607	VRS-CY1JF220JY	22 1/16W Metal Oxide	J	AA	AA
R2608	VRS-CY1JF220JY	22 1/16W Metal Oxide	J	AA	AA
R2609	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R2610	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R2611	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2612	VRS-CY1JF822FY	8.2k 1/16W Metal Oxide	J	AA	AA
R2616	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R2618	VRS-CY1JF220JY	22 1/16W Metal Oxide	J	AA	AA
R2620	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R2625	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2629	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2630	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R2631	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R2633	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2634	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R2636	VRS-CY1JF102JY	1k 1/16W Metal Oxide	J	AA	AA
R2639	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R2640	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R2641	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R2646	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R2647	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4101	VRS-CY1JF102FY	1k 1/16W Metal Oxide	J	AA	AA
R4102	VRS-CY1JF123FY	12k 1/16W Metal Oxide	J	AA	AA
R4103	VRS-CY1JF472FY	4.7k 1/16W Metal Oxide	J	AA	AA
R4109	VRS-CY1JF562FY	5.6k 1/16W Metal Oxide	J	AA	AA
R4112	VRS-CY1JF153FY	15k 1/16W Metal Oxide	J	AA	AA
R4113	VRS-CY1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4114	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4114	VRS-CY1JF623FY	62k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4115	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4118	VRS-CY1JF153FY	15k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4118	VRS-CY1JF163FY	16k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4119	VRS-CY1JF362FY	3.6k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4119	VRS-CY1JF472FY	4.7k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4120	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4121	VRS-CY1JF332FY	3.3k 1/16W Metal Oxide	J	AA	AA
R4122	VRS-CY1JF682FY	6.8k 1/16W Metal Oxide	J	AA	AA
R4123	VRS-CY1JF332FY	3.3k 1/16W Metal Oxide	J	AA	AA
R4124	VRS-CY1JF392FY	3.9k 1/16W Metal Oxide	J	AA	AA
R4125	VRS-CY1JF332FY	3.3k 1/16W Metal Oxide	J	AA	AA
R4126	VRS-CY1JF682FY	6.8k 1/16W Metal Oxide	J	AA	AA
R4130	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4132	VRS-CY1JF513FY	51k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4132	VRS-CY1JF913FY	91k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4133	VRS-CY1JF183FY	18k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4133	VRS-CY1JF333FY	33k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4134	VRS-CY1JF221FY	220 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4134	VRS-CY1JF681FY	680 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4135	VRS-CY1JF103FY	10k 1/16W Metal Oxide	J	AA	AA
R4136	VRS-CY1JF393FY	39k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4136	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4137	VRS-CY1JF163FY	16k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R4137	VRS-CY1JF223FY	22k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4138	VRS-CY1JF122FY	1.2k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4138	VRS-CY1JF160FY	16 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4139	VRS-CH1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4140	VRS-CY1JF393FY	39k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4140	VRS-CY1JF623FY	62k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4141	VRS-CY1JF183FY	18k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4141	VRS-CY1JF273FY	27k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4142	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
		(LC-32GA5E)			
R4142	VRS-CY1JF152FY	1.5k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4143	VRS-CY1JF333FY	33k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4143	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4144	VRS-CY1JF163FY	16k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4144	VRS-CY1JF273FY	27k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4145	VRS-CY1JF122FY	1.2k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4145	VRS-CY1JF431FY	430 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4146	VRS-CH1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4147	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4148	VRS-CY1JF433FY	43k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4148	VRS-CY1JF473FY	47k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4149	VRS-CY1JF243FY	24k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4149	VRS-CY1JF273FY	27k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4150	VRS-CY1JF391FY	390 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4150	VRS-CY1JF681FY	680 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4152	VRS-CY1JF163FY	16k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4152	VRS-CY1JF333FY	33k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4153	VRS-CY1JF153FY	15k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4153	VRS-CY1JF333FY	33k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4154	VRS-CY1JF122FY	1.2k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4154	VRS-CY1JF431FY	430 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4155	VRS-CY1JF330FY	33 1/16W Metal Oxide	J	AA	AA
R4156	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4157	VRS-CY1JF163FY	16k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4157	VRS-CY1JF273FY	27k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4158	VRS-CY1JF183FY	18k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4158	VRS-CY1JF333FY	33k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4159	VRS-CY1JF471FY	470 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R4159	VRS-CY1JF681FY	680 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4160	VRS-CY1JF330FY	33 1/16W Metal Oxide	J	AA	AA
R4161	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4162	VRS-CY1JF243FY	24k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4162	VRS-CY1JF273FY	27k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4163	VRS-CY1JF513FY	51k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4163	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4164	VRS-CY1JF390FY	39 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4164	VRS-CY1JF621FY	620 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4165	VRS-CH1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4166	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4167	VRS-CY1JF123FY	12k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4167	VRS-CY1JF243FY	24k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4168	VRS-CY1JF273FY	27k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4168	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4169	VRS-CY1JF391FY	390 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4169	VRS-CY1JF681FY	680 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4170	VRS-CY1JF153FY	15k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4170	VRS-CY1JF223FY	22k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4171	VRS-CY1JF393FY	39k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4171	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4172	VRS-CY1JF111FY	110 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4172	VRS-CY1JF821FY	820 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4174	VRS-CY1JF103FY	10k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4174	VRS-CY1JF223FY	22k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4175	VRS-CY1JF273FY	27k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4175	VRS-CY1JF623FY	62k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4176	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
		(LC-26GA5E)			
R4176	VRS-CY1JF361FY	360 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4177	VRS-CH1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4178	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4179	VRS-CY1JF513FY	51k 1/16W Metal Oxide	J	AA	AA
R4180	VRS-CY1JF332FY	3.3k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4180	VRS-CY1JF392FY	3.9k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4181	VRS-CY1JF682FY	6.8k 1/16W Metal Oxide	J	AA	AA
R4182	VRS-CY1JF103FY	10k 1/16W Metal Oxide	J	AA	AA
R4183	VRS-CY1JF153FY	15k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4183	VRS-CY1JF183FY	18k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4184	VRS-CY1JF133FY	13k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R4184	VRS-CY1JF223FY	22k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4186	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4187	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4188	VRS-CY1JF102FY	1k 1/16W Metal Oxide	J	AA	AA
R4190	VRS-CY1JF473FY	47k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4190	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4191	VRS-CY1JF473FY	47k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4191	VRS-CY1JF823FY	82k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4192	VRS-CY1JF563FY	56k 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4192	VRS-CY1JF623FY	62k 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4193	VRS-CY1JF102JY	1k 1/16W Metal Oxide	J	AA	AA
R4194	VRS-CY1JF121JY	120 1/16W Metal Oxide	J	AA	AA
R4196	VRS-CY1JF750FY	75 1/16W Metal Oxide	J	AA	AA
R4198	VRS-CY1JF562FY	5.6k 1/16W Metal Oxide	J	AA	AA
R4199	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R4200	VRS-CY1JF121FY	120 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4200	VRS-CY1JF821FY	820 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4201	VRS-CY1JF621FY	620 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4201	VRS-CY1JF821FY	820 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4202	VRS-CY1JF151FY	150 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4202	VRS-CY1JF821FY	820 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4203	VRS-CY1JF121FY	120 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4203	VRS-CY1JF271FY	270 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4204	VRS-CY1JF682FY	6.8k 1/16W Metal Oxide	J	AA	AA
R4205	VRS-CY1JF681FY	680 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4205	VRS-CY1JF820FY	82 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4206	VRS-TV1JD102JY	1k 1/16W Metal Oxide	J	AA	AA
R4208	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4209	VRS-TW2ED221JY	220 1/4W Metal Oxide	J	AB	AB
R4210	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4211	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4213	VRS-TW2ED221JY	220 1/4W Metal Oxide	J	AB	AB
R4216	VRS-CY1JF105FY	1M 1/16W Metal Oxide	J	AA	AA
R4217	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4218	VRS-CY1JF393FY	39k 1/16W Metal Oxide	J	AA	AA
R4219	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4220	VRS-CY1JF105FY	1M 1/16W Metal Oxide	J	AA	AA
R4221	VRS-TW2ED153JY	15k 1/4W Metal Oxide	J	AA	AA
R4222	VRS-TW2ED562JY	5.6k 1/4W Metal Oxide	J	AB	AB
R4223	RR-NZ0027TAZZY	0,056 1/4W	J	AC	AC
R4224	VRS-TV1JD222JY	2.2k 1/16W Metal Oxide	J	AA	AA
R4225	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4226	VRS-TV1JD222JY	2.2k 1/16W Metal Oxide	J	AA	AA
R4227	VRS-TW2ED821JY	820 1/4W Metal Oxide	J	AB	AB
R4228	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4229	VRS-CY1JF105FY	1M 1/16W Metal Oxide	J	AA	AA
R4230	VRS-CY1JF202FY	2k 1/16W Metal Oxide	J	AA	AA
R4231	VRS-CY1JF513FY	51k 1/16W Metal Oxide	J	AA	AA
R4233	VRS-CY1JF393FY	39k 1/16W Metal Oxide	J	AA	AA
R4234	VRS-CY1JF154FY	150k 1/16W Metal Oxide	J	AA	AA
R4235	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R4238	VRS-CY1JF105JY	1M 1/16W Metal Oxide	J	AA	AA
R4239	VRS-TW2ED682JY	6.8k 1/4W Metal Oxide	J	AA	AA
R4244	VRS-TW2ED562JY	5.6k 1/4W Metal Oxide	J	AB	AB
R4250	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4256	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R4260	VRS-CY1JF332FY	3.3k 1/16W Metal Oxide	J	AA	AA
R4261	VRS-TW2ED101JY	100 1/4W Metal Oxide	J	AA	AA
R4262	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4263	VRS-CY1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4264	VRS-TW2ED101JY	100 1/4W Metal Oxide	J	AA	AA
R4270	VRS-CY1JF104JY	100k 1/16W Metal Oxide	J	AA	AA
R4271	VRS-CY1JF911FY	910 1/16W Metal Oxide	J	AA	AA
R4272	VRS-CY1JF243FY	24k 1/16W Metal Oxide	J	AA	AA
R4273	VRS-CY1JF513JY	51k 1/16W Metal Oxide	J	AA	AA
R4275	VRS-CY1JF562FY	5.6k 1/16W Metal Oxide	J	AA	AA
R4279	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4280	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4281	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4282	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4286	VRS-CJ1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4288	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4501	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4502	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4505	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4506	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4507	VRS-CJ1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R4508	VRS-CY1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4509	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4510	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4511	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4512	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4513	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4514	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4516	VRS-CY1JF133FY	13k 1/16W Metal Oxide	J	AA	AA
R4518	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4519	VRS-CH1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4520	VRS-CJ1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4521	VRS-CJ1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4522	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R4523	VRS-CH1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4524	VRS-CJ1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4525	VRS-CY1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4526	VRS-CY1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4527	VRS-CY1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4528	VRS-CY1JF330JY	33 1/16W Metal Oxide	J	AA	AA
R4529	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4601	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4602	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4603	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4604	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4605	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4606	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4607	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4608	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4609	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4610	VRS-CY1JF101FY	100 1/16W Metal Oxide	J	AD	AD
R4611	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4613	VRS-CY1JF473JY	47k 1/16W Metal Oxide	J	AA	AA
R4614	VRS-CJ1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4615	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4616	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA
R4617	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4618	VRS-CY1JF473JY	47k 1/16W Metal Oxide	J	AA	AA
R4619	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA
R4620	VRS-CY1JF270JY	27 1/16W Metal Oxide	J	AA	AA
R4621	VRS-CY1JF270JY	27 1/16W Metal Oxide	J	AA	AA
R4622	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA
R4623	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA
R4624	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA
R4625	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R4626	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA
R4627	VRS-CH1JF680JY	68 1/16W Metal Oxide	J	AA	AA
R4628	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R4629	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R4630	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R4631	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R4632	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4637	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R4639	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4640	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4642	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4651	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4652	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4653	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4654	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4655	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4656	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4901	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4902	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4903	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4904	VRS-CH1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4905	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
R4906	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4907	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4908	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4909	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4910	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4911	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4912	VRS-CH1JF101JY	100 1/16W Metal Oxide	J	AA	AA
		(LC-26GA5E)			
R4912	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4913	RBLN-A005WJZZY	Ferrite Bead(LC-26GA5E)	J		
R4913	VRS-CY1JF100JY	10 1/16W Metal Oxide	J	AA	AA
		(LC-32GA5E)			
R4914	VRS-CJ1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4915	VRS-CJ1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4916	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4917	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4918	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4919	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4920	VRS-CH1JF470JY	47 1/16W Metal Oxide	J	AA	AA
R4922	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R4923	VRS-CY1JF000JY	0 1/16W Metal Oxide	J	AA	AA
R4924	VRS-CY1JF472JY	4.7k 1/16W Metal Oxide	J	AA	AA
R7711	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R7714	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R7721	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R7723	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7725	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R7729	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7730	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7731	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7732	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7733	VRS-CY1JF362FY	3.6k 1/16W Metal Oxide	J	AA	AA
R7734	VRS-CY1JF222FY	2.2k 1/16W Metal Oxide	J	AA	AA
R7735	VRS-CY1JF223JY	22k 1/16W Metal Oxide	J	AA	AA
R7744	VRS-CY1JF332FY	3.3k 1/16W Metal Oxide	J	AA	AA
R7745	VRS-CY1JF102FY	1k 1/16W Metal Oxide	J	AA	AA
R7746	VRS-CY1JF332FY	3.3k 1/16W Metal Oxide	J	AA	AA
R7747	VRS-TW2ED330JY	33 1/4W Metal Oxide	J	AA	AA
R7748	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R7749	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R7750	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7751	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R7752	VRS-CY1JF101JY	100 1/16W Metal Oxide	J	AA	AA
R7755	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7756	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA
R7759	VRS-TV1JD000JY	0 1/16W Metal Oxide	J	AA	AA

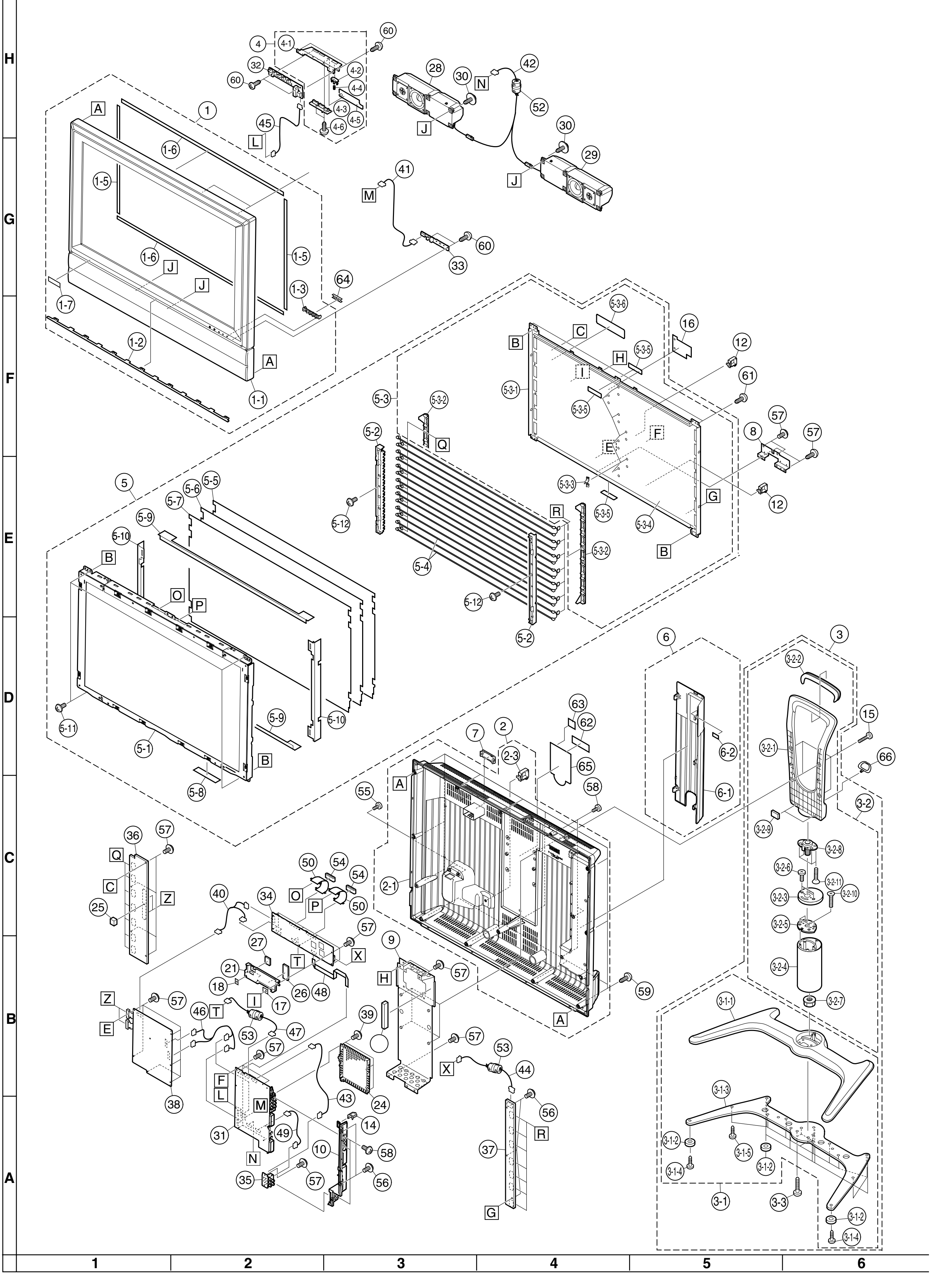
REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
R7760	VRS-TW2ED221JY	220 1/4W Metal Oxide	J	AB	AB
R7761	VRS-TW2ED221JY	220 1/4W Metal Oxide	J	AB	AB
R7762	VRS-TW2ED221JY	220 1/4W Metal Oxide	J	AB	AB
R7763	VRS-TW2ED221JY	220 1/4W Metal Oxide	J	AB	AB
R7770	VRS-CY1JF103JY	10k 1/16W Metal Oxide	J	AA	AA
R7771	VRS-CY1JF473JY	47k 1/16W Metal Oxide	J	AA	AA
	MISCELLANEOUS PARTS				
FB2001	RBLN-0006TAZZY	Ferrite Bead	J	AB	AB
FB4101	RBLN-0252TAZZY	Ferrite Bead	J	AA	AA
FB4102	RBLN-0252TAZZY	Ferrite Bead	J	AA	AA
FB4501	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4502	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4503	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4504	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4505	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4601	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4602	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB4603	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4604	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4605	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4901	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4902	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4903	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB4904	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB7709	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB7710	RBLN-0210TAZZY	Ferrite Bead	J	AB	AB
FB7712	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB7713	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB7716	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB7717	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB7718	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB7719	RBLN-A005WJZZY	Ferrite Bead	J	AA	AA
FB7720	RBLN-0252TAZZY	Ferrite Bead	J	AA	AA
P2001	QPLGN0544FJZZY	Plug, 7Pin(AD)	J	AD	AD
P2005	QPLGNA144WJZZY	Plug, 20Pin	J	AF	AF
P2006	QPLGNA178WJZZY	Plug, 9Pin(SH)	J	AE	AE
P7704	QPLGNA177WJZZY	Plug, 8Pin(GV)	J	AE	AE
P7705	QPLGNA181WJZZY	Plug, 12Pin(BL)	J	AF	AF
P7707	QPLGNA177WJZZY	Plug, 8Pin(PO)	J	AE	AE
SC4601	QSOCN0491FJZZY	Socket, 33Pin(LV)	J	AF	AF
SC4651	QSOCNA222WJZZY	Socket, 80Pin	J	AH	AH
SC4652	QSOCNA222WJZZY	Socket, 80Pin	J	AH	AH
PWB-E		**YUB (COMPONENTS) UNIT**			
	TRANSISTORS				
Q 1901	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
Q 1902	VS2SA1530AR-1	TRT SA1530A-T12-1R MITSUBISHI	S	AA	AA
Q 1903	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
Q 1904	VS2SA1530AR-1	TRT SA1530A-T12-1R MITSUBISHI	S	AA	AA
Q 1905	VS2SC3928AR-1	TRT 2SC3928AR-T12-1R MITSUBISHI	S	AA	AA
Q 1906	VS2SA1530AR-1	TRT SA1530A-T12-1R MITSUBISHI	S	AA	AA
	DIODES				
D 1901	RH-EX1264CEZZ	ZENER DIODE HZU10B1TRF HITACHI	S	AA	AA
D 1902	RH-EX1264CEZZ	ZENER DIODE HZU10B1TRF HITACHI	S	AA	AA
D 1903	RH-EX1264CEZZ	ZENER DIODE HZU10B1TRF HITACHI	S	AA	AA
	CAPACITORS				
C 1901	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1902	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1903	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1904	VCKYCY1HB102K	CAPACITOR GRM39B 102K 50 (1608)SMD	S	AA	AA
C 1905	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1906	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1907	VCKYCY1AF105Z	CAPACITOR GRM39F 105Z 10 (1608)SMD	S	AA	AA
C 1908	VCEAPF1CW107M	ELEC C 100UF 20% 16V	S	AA	AA
	RESISTORS				
R 1901	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
	R 1902	VRS-CY1JF221J	RES 0603 220 OHM 5% 1/10W SMD	S	AA	AA
	R 1903	VRS-TQ2BD100J	OX RES 10 OHM 5% 1/8W SMD	S	AA	AA
	R 1904	VRS-CY1JF220J	RES 0603 22 OHM 5% 1/10W SMD	S	AA	AA
	R 1905	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
	R 1906	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
	R 1907	VRS-CY1JF274J	RES 0603 270KOHM 5% 1/10W SMD	S	AA	AA
	R 1908	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
	R 1909	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
	R 1910	VRS-CY1JF750J	S CHIP RESISTOR 75 OHM	S	AA	AA
	R 1911	VRS-CY1JF220J	RES 0603 22 OHM 5% 1/10W SMD	S	AA	AA
	R 1912	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
	R 1913	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
	R 1915	VRS-CY1JF274J	RES 0603 270KOHM 5% 1/10W SMD	S	AA	AA
	R 1916	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
	R 1917	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
	R 1918	VRS-CY1JF750J	S CHIP RESISTOR 75 OHM	S	AA	AA
	R 1919	VRS-CY1JF220J	RES 0603 22 OHM 5% 1/10W SMD	S	AA	AA
	R 1920	VRS-CY1JF104J	RES 0603 100KOHM 5% 1/10W SMD	S	AA	AA
	R 1921	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
	R 1922	VRS-CY1JF274J	RES 0603 270KOHM 5% 1/10W SMD	S	AA	AA
	R 1923	VRS-CY1JF471J	RES 0603 470 OHM 5% 1/10W SMD	S	AA	AA
	R 1924	VRS-CY1JF151J	RES 0603 150 OHM 5% 1/10W SMD	S	AA	AA
	R 1925	VRS-CY1JF750J	S CHIP RESISTOR 75 OHM	S	AA	AA
		MISCELLANEOUS PARTS				
	FB 1901	RBLN-0051TAZZ	FERRITE BLM18AG601SN1D-A1 MURATA	S	AA	AA
	FB 1902	RBLN-0051TAZZ	FERRITE BLM18AG601SN1D-A1 MURATA	S	AA	AA
	J 1901	QTANJA070WJZZ	TERMINAL	S	AB	AF
	LUG1901	QLUGHA006WJZZ	METALLIC LUG	S	AA	AB
	P 1901	QPLGN1041CEZZ	PLUG	S	AA	AB
	P 1902	QPLGN0741CEZZ	CONNECTOR B7B-EH	S	AA	AA
	PWB-F		**POWER SUPPLY UNIT**			
⚠		RDENCA101WJZZ	POWER SYPPLY UNIT (LC26GA5E)	J	BG	BY
⚠		RDENCA102WJZZ	POWER SYPPLY UNIT (LC32GA5E)	J	BH	BZ
	PWB-G		**INVERTER UNIT (1)**			
⚠	PWB-G	RUNTKA094WJZZ	INVERTER PSD-0397 (LC26GA5E)	J	AZ	BN
⚠	PWB-G	RUNTKA096WJZZ	INVERTER PSD-0396-A (LC32GA5E)	J	AV	BG
	PWB-H		**INVERTER UNIT (2)**			
⚠	PWB-H	RUNTKA095WJZZ	INVERTER PSD-0398 (LC26GA5E)	J	AM	AY
⚠	PWB-H	RUNTKA097WJZZ	INVERTER PSD-0396-B (LC32GA5E)	J	AV	BG
	PWB-I		**INVERTER UNIT (3)**			
⚠	PWB-I	RUNTKA098WJZZ	INVERTER PSD-0396-C (LC32GA5E)	J	AN	AZ
			MISCELLANEOUS PARTS			
		TCAUHA146WJZZ	ERRATUM SHEET	S	AA	AB

LC-26GA5E CABINET AND MECHANICAL PARTS LISTING

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
1	CCABAA763WJ01	Front Cabinet ass'y	S	BQ	BQ
1-1	Not Available	Front Cabinet	-	-	-
1-2	GCOVAB066WJKA	SP Decoration Cover	J		
1-3	HDECQA471WJSA	R/C LED Decoration Cover	J		
1-5	PSPAHA323WJZZ	Mask Spacer, x2	J	AD	AD
1-6	PSPAHA324WJZZ	Mask Spacer, x2	J	AC	AC
1-7	TLABZA792WJZZ	EICTA Label (LC-26GA5E/K/F/I)	J		
2	CCABBA491WJ01	Rear Cabinet Ass'y	S	BK	BK
2-1	Not Available	Rear Cabinet	-	-	-
2-3	LHLDWA055WJKZ	Wire Holder	J	AC	AC
3	Not Available	Stand Ass'y	-	-	-
3-1	CDAi-A146WJ01	Stand Base Ass'y	S	BQ	BQ
3-1-1	GDAi-A146WJKA	Stand Base	J		
3-1-2	GLEGPA028WJZZ	Rubber Leg, x7	J	AC	AC
3-1-3	LANGKA234WJSA	Base Angle	J	BD	BD
3-1-4	XEBS940P12000	Screw, x2	J	AB	AB
3-1-5	XEBS940P14000	Screw, x11	J	AB	AB
3-2	CHNDPA014WJ02	Stand Handle Ass'y	J		
3-2-1	JHNDPA014WJKA	Stand Handle	J		
3-2-2	GCOVAA713WJSA	Handle Grip	J	AH	AH
3-2-3	GCOVAB019WJKA	Swivel Cover	J		
3-2-4	GDAi-A157WJSA	Stand Support	J		
3-2-5	LANGKA363WJF7	Swivel Base	J		
3-2-6	LX-BZA019WJFN	Screw, x2	J	AB	AB
3-2-7	LX-NZA001WJFN	Nut	J	AD	AD
3-2-8	MHNG-A083WJ01	Swivel Hinge	J		
3-2-9	PSPAZA083WJZZ	Spacer, x2	J	AB	AB
3-2-10	XCSSN50P25000	Screw, x4	J	AB	AB
3-2-11	XUSSN40P25000	Screw, x4	J		
3-3	XCBS950P25000	Screw, x4	J	AC	AC
4	CCOVAB077WJ01	Top Cover Ass'y	S	AN	AN
4-1	Not Available	Top Cover	-	-	-
4-2	JBTN-A254WJKB	Power Button	J	AG	AG
4-3	JBTN-A404WJKA	Operation Button	J		
4-4	MSPRCA015WJFW	Spring, for Power Button	J	AB	AB
4-5	PZETKA119WJZZ	Spacer	J		
4-6	XEBSN30P08000	Screw, x2	J	AA	AA
5	Not Available	26" LCD Panel Unit Ass'y	-	-	-
5-1	RLCDTA034WJZZ	26" LCD Panel Unit	J		
5-2	LHLDZA443WJKZ	Lamp Holder (Top), x2	J	AM	AM
5-3	Not Available	Back Shield Ass'y	-	-	-
5-3-1	PSLDMA553WJFW	Back Shield	J		
5-3-2	LHLDZA444WJKZ	Lamp Holder(Bottom), x2	J	AL	AL
5-3-3	LHLDZA445WJKZ	Lamp Clip, x7	J	AD	AD
5-3-4	PMiR-A054WJZZ	Reflection Mirror	J		
5-3-5	PSPAZA561WJZZ	Spacer, x3	J	AB	AB
5-3-6	TCAUZA031WJZZ	Caution Label	J	AB	AB
5-4	KLMP-A042WJZZ	Fluorescent Lamp, x7	J	AZ	AZ
5-5	PCOVUA026WJZZ	Diffusion Panel	J	BA	BA
5-6	PSHEPA166WJZZ	Diffusion Sheet	J	AS	AS
5-7	PSHEPA236WJZZ	Reflection/deflection Sheet	J	BS	BS
5-8	PSPAHA466WJZZ	Spacer	J		
5-9	PSPAZA535WJZZ	Sheet Spacer-B, x2	J	AM	AM
5-10	PSPAZA536WJZZ	Sheet Spacer-S, x2	J	AH	AH
5-11	XBBS740P08000	Screw, x4 (for LCD Panel Unit)	J		
5-12	XBPS730P08JS0	Screw, x2 (for Lamp Holder)	J	AB	AB
6	CCOVAB065WJ01	Terminal Cover ass'y	S	AP	AP
6-1	Not Available	Terminal Cover	-	-	-
6-2	PSPAHA413WJZZ	Spacer, x1	J	AB	AB
7	GCOVAB018WJKB	BUS Connector Cover	S	AE	AE
8	LANGKA259WJFW	Reinforcement Angle(Bottom)	J	AG	AG
9	LANGTA146WJFW	VESA Angle	J		
10	LCHSMA161WJKA	Chassia Frame	J		
11	LHLDW1046CEZZ	Wire Holder, x2	J		
12	LHLDW1173CEZZ	Wire Holder	J	AD	AD
14	LHLDWA048WJKZ	Wire Holder, x1	J	AB	AB
15	LX-BZ3442CEF9	Screw, x4 (for Stand)	J	AB	AB
16	PFLT-A051WJZZ	LCD Conductive Spacer	J		
17	PFLT-A052WJZZ	LCD Conductive Spacer-L	J		
18	PFLT-A053WJZZ	LCD Conductive Spacer-R	J		
19	PMLT-A132WJZZ	Gasket	J	AH	AH
20	PMLT-A179WJZZ	Gasket, x3 (for Main Unit)	J		
21	PRDARA187WJFW	Heat Sink	J		
22	PRDARA173WJFW	Heat Sink	J		
23	PSLDMA538WJFW	Shield Spacer	J		
24	PSLDMA568WJFW	Shield	J		
25	PSPAGA243WJZZ	Inverter Cushion	J		
26	PSPAZA567WJKZ	Spacer	J		
27	PSPAZA568WJKZ	Spacer	J		
28	RSP-ZA096WJZZ	Speaker Box(L)	J		
29	RSP-ZA097WJZZ	Speaker Box(R)	J		
30	LX-HZA003WJFN	Screw, x2 (for Speaker Box)	J	AC	AC
31	DUNTKC656WE03	MAIN Unit	J		
32	DUNTKC864WE03	OPERATION Unit	J		
33	DUNTKC865WE03	R/C LED Unit	J		
34	DUNTKC919FE01	LCD CONTROLLER Unit	J		
35	DUNTKC920WE01	COMPONENT Unit	J		
36	RUNTKA094WJZZ	INVERTER Unit	J	BK	BK
37	RUNTKA095WJZZ	INVERTER-GND Unit	J	AW	AW
38	RDENCA101WJZZ	POWER Unit	J		
39	LX-BZ3370CEF7	Screw, x5	J		
40	QCNW-D041WJQZ	Connecting Cord(PO)	J		
41	QCNW-D042WJQZ	Connecting Cord(RA)	J		
42	QCNW-D043WJQZ	Connecting Cord(SP)	J		
43	QCNW-D044WJPZ	Connecting Cord(YU)	J		
44	QCNW-D045WJQZ	Connecting Cord(GV)	J		
45	QCNW-D046WJQZ	Connecting Cord(KE)	J		
46	QCNW-D047WJQZ	Connecting Cord(PA)	J		
47	QCNW-D049WJQZ	Connecting Cord(SH)	J		
48	QCNW-D050WJQZ	FFC(LV)	J		
49	QCNW-D295WJPZ	Connecting Cord(UV)	J		
50	QPWBMD146WJPZ	FPC, x2 (with Copper)	J		
51	QEARPA149WJFW	Tuner Earth Angle	J		
52	RCORF0103CEZZ	Core (for Speaker)	J	AK	AK
53	RCORFA023WJZZ	Core, x3 (for GV,SH,RA)	J	AK	AK
54	RCORFA039WJZZ	Core, x2 (for FPC)	J	AG	AG
55	XBBS930P06000	Screw, x2	J	AA	AA
56	XBPS730P04WS0	Screw, x5	J		
57	XBPS730P08WS0	Screw, x28	J		
58	XEBS930P08000	Screw, x6	J	AA	AA
59	XEBS940P16000	Screw, x13 (for Cabinet-B)	J	AB	AB
60	XEBSN30P08000	Screw, x6	J	AA	AA
61	XEBSN40P10000	Screw, x4 (for Stand)	J	AB	AB
62	Not Available	Serial No. Label	-	-	-
63	TLABSA052WJZZ	Label (LC-26GA5R)	J		
64	PCOVUA057WJZZ	LED Shading Cover	J		
65	HiNDPB194WJSA	Model Label (LC-26GA5E/K/F/R)	J		
65	HiNDPB195WJSA	Model Label (LC-26GA5I)	J		
66	LHLDW0110CEZZ	Wire Holder	J		

Cabinet and Mechanical Parts (LC-26GA5E)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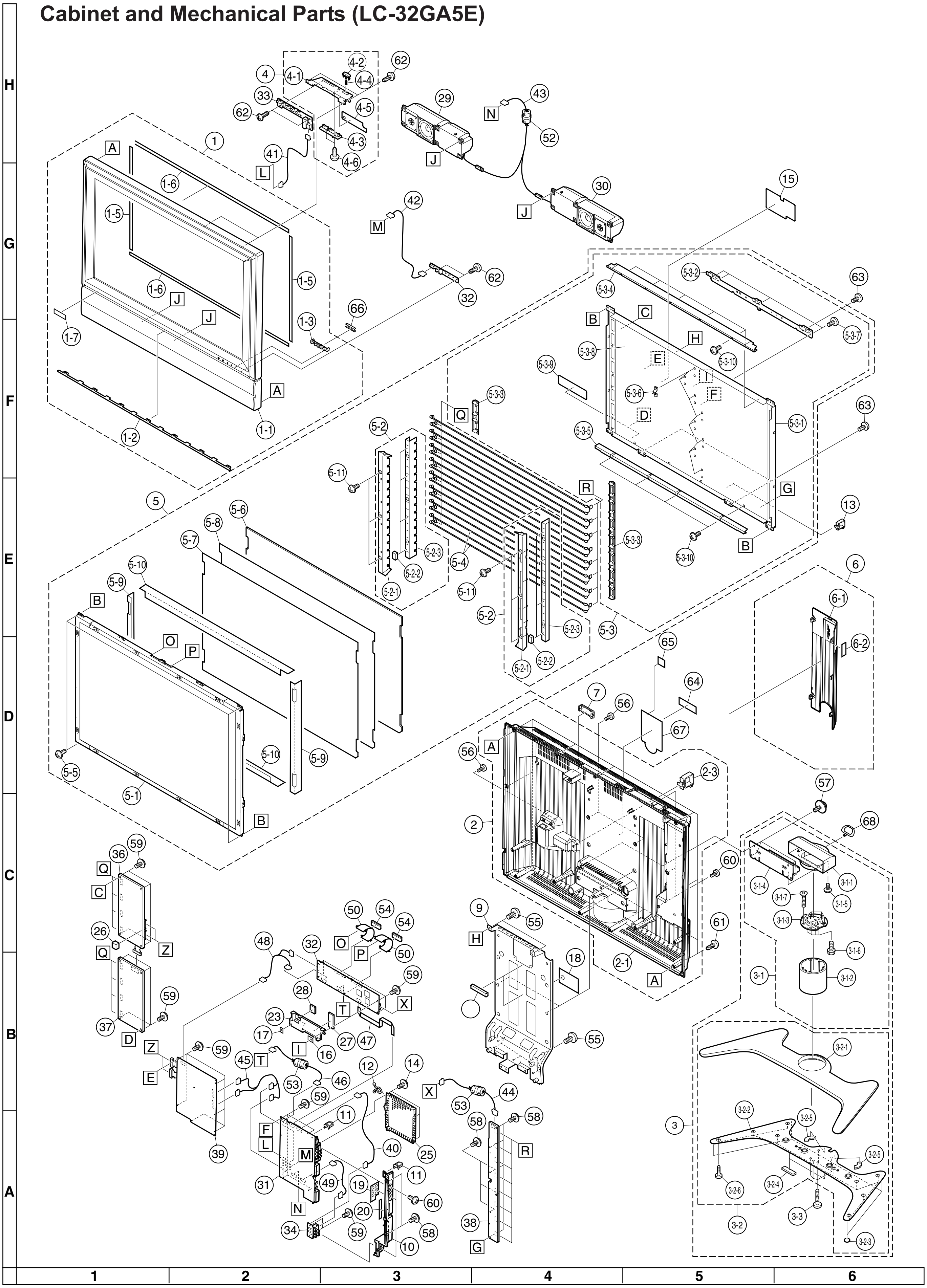
LC-32GA5E CABINET AND MECHANICAL PARTS LISTING

REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
1	CCABAA760WJ01	Front Cabinet Ass'y	S	BT	BT
1-1	Not Available	Front Cabinet	-	-	-
1-2	GCOVAB063WJKA	SP Decoration Cover	J		
1-3	HDECQA471WJSA	R/C LED Decoration Cover	J		
1-5	PSPAHA298WJZZ	Mask Spacer, x2	J	AC	AC
1-6	PSPAHA407WJZZ	Mask Spacer, x2	J	AD	AD
1-7	TLABZA792WJZZ	EICTA Label (LC-32GA5E/K/F/I)	J		
2	CCABBA490WJ01	Rear Cabinet Ass'y	S	BM	BM
2-1	Not Available	Rear Cabinet	-	-	-
2-3	LHLDWA055WJKZ	Wire Holder (for AC Cord)	J	AC	AC
3	Not Available	Stand Ass'y	-	-	-
3-1	CCOVAB012WJ05	Stand Hinge ass'y	S	BP	BP
3-1-1	GCOVAB012WJKA	Stand Hinge	J		
3-1-2	GDAi-A155WJKA	Stand Support	J		
3-1-3	GDAi-A160WJF7	Support Cover	J		
3-1-4	LANGTA156WJSA	Stand Bracket	J		
3-1-5	LX-BZA046WJFN	Screw, x2	J	AA	AA
3-1-6	LX-BZA091WJF7	Screw, x4	J		
3-1-7	XCSS940P25000	Screw, x5	J	AB	AB
3-2	CDAi-A147WJ01	Stand Base Ass'y	S	BV	BV
3-2-1	GDAi-A147WJKA	Stand Base	J		
3-2-2	LANGKA282WJSA	Base Angle	J	BF	BF
3-2-3	PSPAZA476WJZZ	Leg Spacer-A, x4	J	AC	AC
3-2-4	PSPAZA477WJZZ	Leg Spacer-B, x2	J	AD	AD
3-2-5	PSPAZA530WJZZ	Leg Spacer-C, x2	J	AD	AD
3-2-6	XEBS940P10000	Screw, x10	J	AB	AB
3-3	XCBS940P25000	Screw, x5	J	AB	AB
4	CCOVAB077WJ01	Top Cover ass'y	S	AN	AN
4-1	Not Available	Top Cover	-	-	-
4-2	JBTN-A254WJKB	Power Button	J	AG	AG
4-3	JBTN-A404WJKA	Operation Button	J		
4-4	MSPRCA015WJFW	Spring, for Power Button	J	AB	AB
4-5	PZETKA119WJZZ	Spacer	J		
4-6	XEBSN30P08000	Screw, x2	J	AA	AA
5	Not Available	32" LCD Panel Unit Ass'y	-	-	-
5-1	RLCDTA028WJZZ	32" LCD Panel Unit	J		
5-2	CHLDZA446WJ01	Lamp Holder (Top) Ass'y, x2	J	AN	AN
5-2-1	LHLDZA446WJKZ	Lamp Holder (Top)	J	AK	AK
5-2-2	PSPAGA251WJZZ	Spacer, x4	J	AA	AA
5-2-3	PSPAKA064WJZZ	Spacer	J		
5-3	Not Available	Back Shield Ass'y	-	-	-
5-3-1	PSLDMA552WJZZ	Back Shield	J		
5-3-2	LANGKA395WJFW	Fixing Angle	J		
5-3-3	LHLDZA309WJK0	Lamp Holder (Bottom)	J	AL	AL
5-3-4	LHLDZA476WJKZ	Reflection mirror Fixing Holder(Top)	J	AQ	AQ
5-3-5	LHLDZA477WJKZ	Reflection mirror Fixing Holder(Bottom)	J	AP	AP
5-3-6	LHLDZA483WJKZ	Lamp Clip, x8	J		
5-3-7	LX-BZA046WJFN	Screw, x5	J	AA	AA
5-3-8	PMiR-A057WJZZ	Reflection Mirror	J	AQ	AQ
5-3-9	TCAUZA031WJZZ	Caution Label	J	AB	AB
5-3-10	XBBSN30P08000	Screw, x9	J	AA	AA
5-4	KLMP-A040WJZZ	Fluorescent Lamp, x8	J	AZ	AZ
5-5	LX-BZA051WJFN	Screw, x4	J	AB	AB
5-6	PCOVUA052WJZZ	Diffusion Panel	J		
5-7	PSHEPA244WJZZ	Reflection/Deflection Sheet	J	BU	BU
5-8	PSHEPA256WJZZ	Diffusion Sheet	J	AU	AU
5-9	PSPAKA088WJZZ	Sheet Spacer-S, x2	J	AH	AH
5-10	PSPAKA089WJZZ	Sheet Spacer-L, x2	J	AK	AK
5-11	XBBSN30P08000	Screw, x6	J	AA	AA
6	CCOVAB062WJ01	Terminal Cover ass'y	S	AP	AP
6-1	Not Available	Terminal Cover	-	-	-
6-2	PSPAHA413WJZZ	Spacer, x1	J	AB	AB
7	GCOVAB018WJKB	BUS CON Cover	S	AE	AE
9	LANGTA149WJZZ	Center Angle	J		
10	LCHSMA161WJKA	Chassis Frame	J		
11	LHLDWA048WJKZ	Wire Holder, x3 (for MAIN Unit x2, Inverter-Earth)	J	AB	AB
12	LHLDW1046CEZZ	Wire Holder, x2 (for MAIN Unit)	J	AA	AA
13	LHLDW1173CEZZ	Wire Holder (for Back Shield)	J	AD	AD
14	LX-BZ3370CEF7	Screw, x5	J		
15	PFLT-A051WJZZ	LCD Conductive	J		
16	PFLT-A052WJZZ	LCD Conductive-L	J		
17	PFLT-A053WJZZ	LCD Conductive-R	J		
18	PFLT-A054WJZZ	Felt	J		
19	PMLT-A194WJZZ	Absorber	J		
20	PMLT-A195WJZZ	Absorber	J		
21	PMLT-A179WJZZ	Gasket, x3 (for Main)	J		
22	PRDARA173WJFW	Heat Sink	J		
23	PRDARA187WJFW	Heat Sink	J		
24	PSLDMA538WJFW	Gasket Shield	J		
25	PSLDMA568WJFW	Shield	J		
26	PSPAGA243WJZZ	Spacer	J		
27	PSPAZA567WJKZ	Spacer	J		
28	PSPAZA568WJKZ	Spacer	J		
29	RSP-ZA096WJZZ	Speaker Box (L)	J		
30	RSP-ZA097WJZZ	Speaker Box (R)	J		
31	DUNTKC656WE08	MAIN Unit	J		
32	DUNTKC864WE08	OPERATION Unit	J		
33	DUNTKC865WE08	R/C LED Unit	J		
34	DUNTKC920WE01	COMPONENT Unit	J		
35	DUNTKC919FE02	LCD CONTROLLER Unit	J		
36	RUNTKA096WJZZ	INVERTER A Unit	J		
37	RUNTKA097WJZZ	INVERTER B Unit	J		
38	RUNTKA098WJZZ	INVERTER GND Unit	J		
39	RDENCA102WJZZ	POWER Unit	J		
40	QCNW-D044WJPZ	Connecting Cord(YU)	J		
41	QCNW-D046WJQZ	Connecting Cord(KE)	J		
42	QCNW-D058WJQZ	Connecting Cord(RA)	J		
43	QCNW-D059WJQZ	Connecting Cord(SP)	J		
44	QCNW-D060WJQZ	Connecting Cord(GV)	J		
45	QCNW-D061WJQZ	Connecting Cord(PA)	J		
46	QCNW-D063WJQZ	Connecting Cord(SH)	J		
47	QCNW-D064WJQZ	FFC (LV)	J		
48	QCNW-D249WJQZ	Connecting Cord(PO)	J		
49	QCNW-D295WJPZ	Connecting Cord(UV)	J		
50	QPWBMD146WJPZ	FPC, x2 (with Copper)	J		
51	QEARPA149WJFW	Tuner Earth Angle	J		
52	RCORF0103CEZZ	Core (for Speaker)	J	AK	AK
53	RCORFA023WJZZ	Core, x3 (for GV,SH,RA)	J	AK	AK
54	RCORFA039WJZZ	Core, x2 (for FPC)	J	AG	AG
55	XBBS740P06000	Screw, x7 (for Center Angle)	J	AA	AA
56	XBBS930P06000	Screw, x4	J	AA	AA
57	XBBSN50P12JS0	Screw, x4 (for Stand)	J	AF	AF
58	XBPS730P04WS0	Screw, x8	J		
59	XBPS730P08WS0	Screw, x26	J		
60	XEBS930P08000	Screw, x6	J	AA	AA
61	XEBS940P16000	Screw, x15 (for Cabinet A)	J	AB	AB
62	XEBSN30P08000	Screw, x6	J	AA	AA
63	XEBSN40P10000	Screw, x3	J	AB	AB
64	Not Available	Serial No. Label	-	-	-
65	TLABSA052WJZZ	Label (LC-32GA5R)	J		
66	PCOVUA057WJZZ	Shading Cover	J		
67	HiNDPB197WJSA	Model Label (LC-32GA5E/K/F/R)	J		
67	HiNDPB198WJSA	Model Label (LC-32GA5I)	J		
68	LHLDW0110CEZZ	Wire Holder	J		

Cabinet and Mechanical Parts (LC-32GA5E)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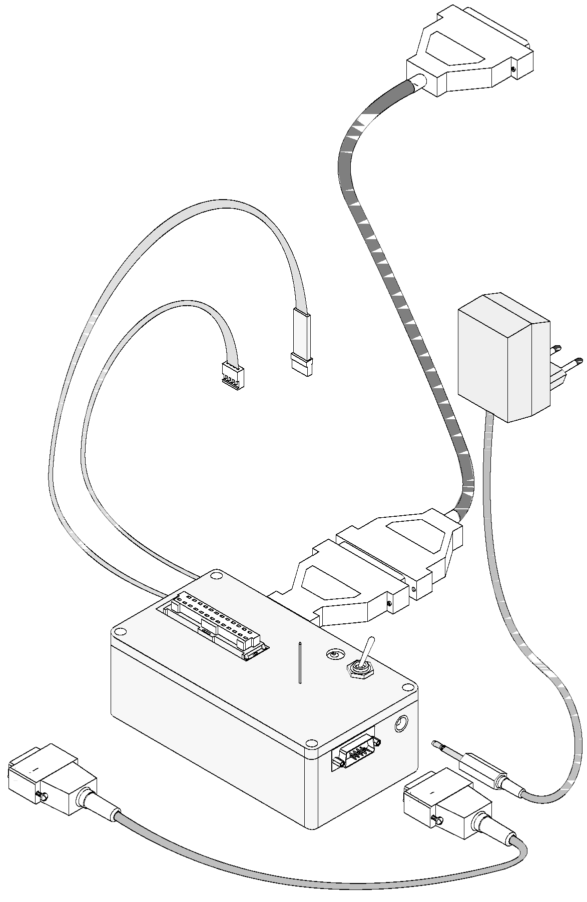
LC-26GA5E SERVICE TOOLS

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
		CKIT-0002WJV0	SET GA-5 VCTi, PW SOFT UPDATING TOOL	-	**	**
		CKIT-0003WJV0	GA-5 QS SOFT UPDATING TOOL	-	**	**

LC-32GA5E SERVICE TOOLS

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
		CKIT-0002WJV0	SET GA-5 VCTi, PW SOFT UPDATING TOOL	-	**	**
		CKIT-0003WJV0	GA-5 QS SOFT UPDATING TOOL	-	**	**



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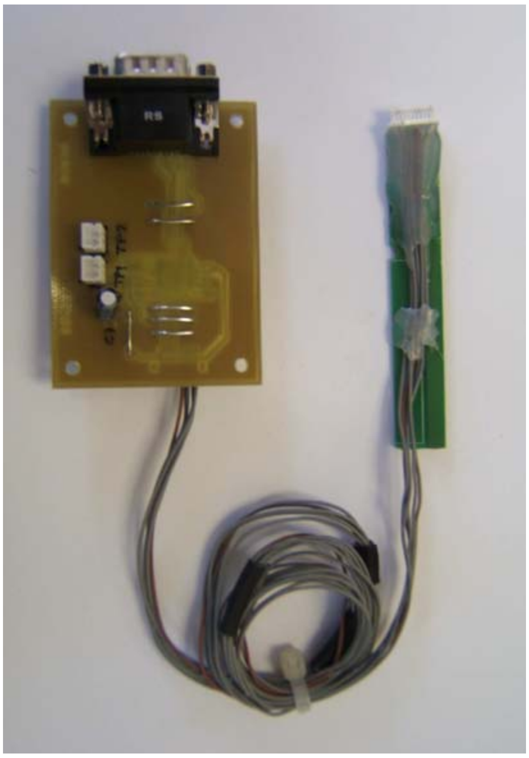

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LC-26GA5E SUPPLIED ACCESSORIES PARTS LISTING

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
⚠	X1	QACCBA021WJPZ	AC Cord (LC-26GA5K)	J	AS	AS
⚠	X1	QACCKA007WJPZ	AC Cord (LC-26GA5E/F/I/R)	J	AK	AK
	X2	RRMCGA323WJSA	Remote Control Unit	J		
	X3	LHLDW0110CEZZ	Cable Clamp	J	AE	AE
	X4	RCORFA020WJZZ	Core, for AC Cord	J	AN	AN
	X5	TiNS-B568WJZZ	Operation Manual	J		
			(LC-26GA5E/K/F/I)			
	X5	TiNS-B569WJZZ	Operation Manual	J		
			(LC-26GA5E/F)			
	X5	TiNS-B570WJZZ	Operation Manual	J		
			(LC-26GA5E)			
	X5	TiNS-B571WJZZ	Operation Manual	J		
			(LC-26GA5R)			
	X6	TGAN-1688CEN1	Guarrantee card	J		
			(LC-26GA5K)			
	X6	TGAN-A077WJZZ	Guarrantee card	J		
			(LC-26GA5R)			
	X7	LHLDWA083WJ00	Cable Tie	J		
	X8	SSAKAA009WJZZ	Polyethylene Bag	J		
	X9	SSAKAA010WJZZ	Polyethylene Bag	J		
	X10	TCAUSA017WJZZ	DOC	J		
	X11	TCAUZA173WJZZ	Errata Sheet	J		

LC-32GA5E SUPPLIED ACCESSORIES PARTS LISTING

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
⚠	X1	QACCBA021WJPZ	AC Cord (LC-32GA5K)	J	AS	AS
⚠	X1	QACCKA007WJPZ	AC Cord (LC-32GA5E/F/I/R)	J	AK	AK
	X2	RRMCGA323WJSA	Remote Control Unit	J		
	X3	LHLDW0110CEZZ	Cable Clamp	J	AE	AE
	X4	RCORFA020WJZZ	Core (for AC Cord)	J	AN	AN
	X5	TiNS-B568WJZZ	Operation Manual	J		
			(LC-32GA5E/K/FI)			
	X5	TiNS-B569WJZZ	Operation manual	J		
			(LC-32GA5E/F)			
	X5	TiNS-B570WJZZ	Operation Manual	J		
			(LC-32GA5E)			
	X5	TiNS-B571WJZZ	Operation Manual	J		
			(LC-32GA5R)			
	X6	TGAN-1688CEN1	Guarrantee card	J		
			(LC-32GA5K)			
	X6	TGAN-A077WJZZ	Guarrantee card	J		
			(LC-32GA5R)			
	X7	LHLDWA083WJ00	Cable Band	J		
	X8	SSAKAA009WJZZ	Polyethylene Bag	J		
	X9	SSAKAA010WJZZ	Polyethylene Bag	J		
	X10	TCAUSA017WJZZ	DOC	J		
	X11	TCAUZA173WJZZ	Errata Sheet	J		

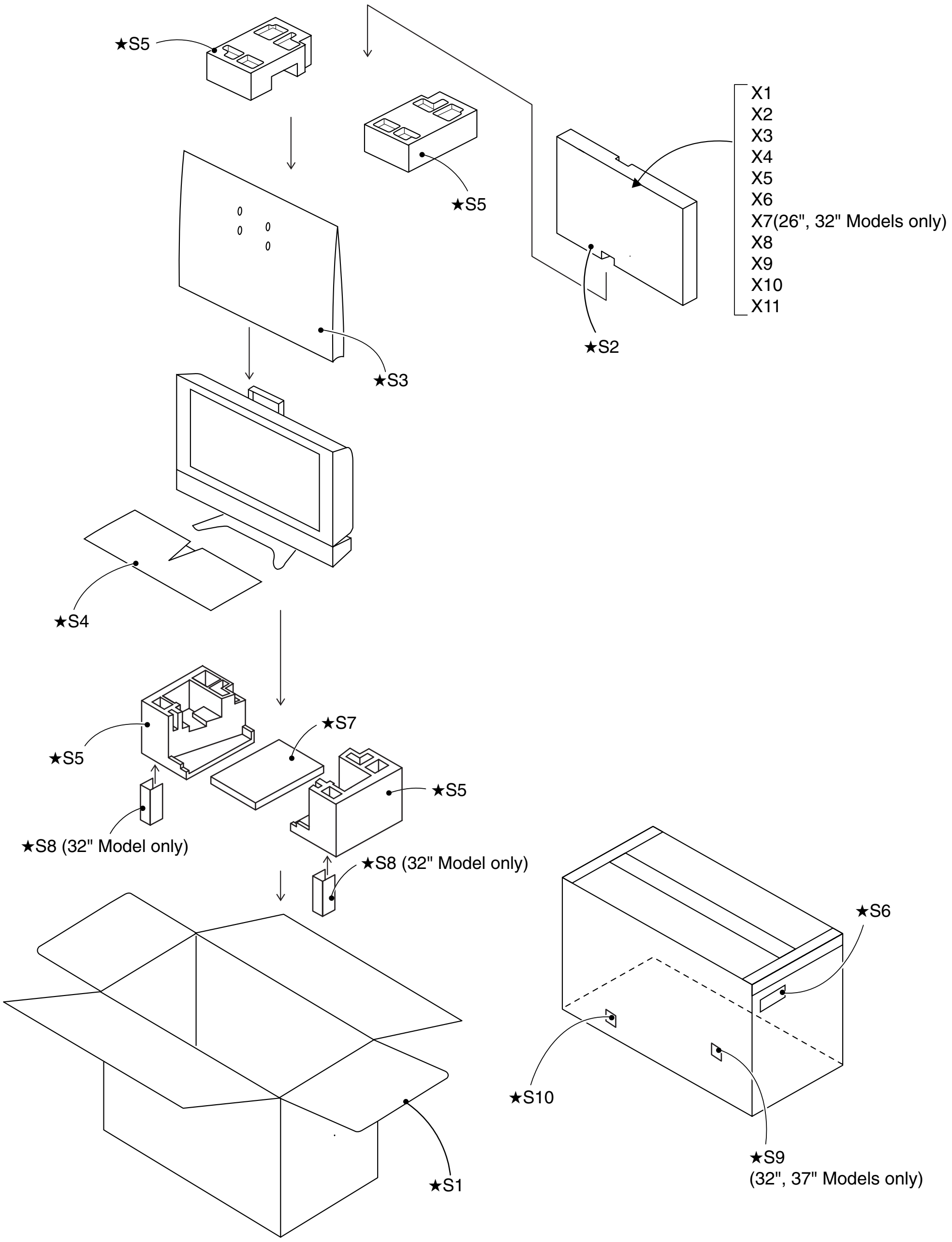
LC-32GA5E PACKING PARTS LISTING

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
	S1	SPAKCB736WJZZ	Packing Case	-		
	S2	SPAKFA784WJZZ	Accessory Box	-	-	-
	S3	SPAKPA382WJZZ	Wrapping Paper (Display)	-	-	-
	S4	SPAKPA377WJZZ	Wrapping Paper (Stand)	-	-	-
	S5	SPAKXA682WJZZ	Pad	-	-	-
	S6	TLABKA002WJZZ	No. Label	-	-	-
	S7	SPAKFA781WJZZ	Buffer Material (for Stand)	-	-	-
	S8	SPAKFA782WJZZ	Buffer Material (Bottom)	-	-	-
	S9	TLABSA050WJZZ	Green Label	-	-	-
			(LC-32GA5F)			
	S10	TLABSA053WJZZ	Gost Label	-	-	-
			(LC-32GA5R)			
		TLABN0134BMZZ	SEES No. Label	-	-	-

LC-32GA5E PACKING PARTS LISTING

	REF No.	PARTS	DESCRIPTION	*	SN CODE	EX CODE
	S1	SPAKCB736WJZZ	Packing Case	-		
	S2	SPAKFA784WJZZ	Accessory Box	-	-	-
	S3	SPAKPA382WJZZ	Wrapping Paper (Display)	-	-	-
	S4	SPAKPA377WJZZ	Wrapping Paper (Stand)	-	-	-
	S5	SPAKXA682WJZZ	Pad	-	-	-
	S6	TLABKA002WJZZ	No. Label	-	-	-
	S7	SPAKFA781WJZZ	Buffer Material (for Stand)	-	-	-
	S8	SPAKFA782WJZZ	Buffer Material (Bottom)	-	-	-
	S9	TLABSA050WJZZ	Green Label	-	-	-
			(LC-32GA5F)			
	S10	TLABSA053WJZZ	Gost Label	-	-	-
			(LC-32GA5R)			
		TLABN0134BMZZ	SEES No. Label	-	-	-

PACKING OF THE SET


★S5
★S5
X1
X2
X3
X4
X5
X6
X7(26", 32" Models only)
X8
X9
X10
X11
★S2
★S3
★S4
★S5
★S7
★S5
★S8 (32" Model only)
★S8 (32" Model only)
★S6
★S10
★S1
★S9
(32", 37" Models only)

★ Not Replacement item

SOURCE OF DOCUMENTATION

1. IC1001, VCT 49XYI.

MICRONAS Data Sheet, Adavance Information
VCT 49XYI, VCT 48XYI VIDEO-CONTROLLER-TEXT-IF-AUDIO IC FAMILY.
Doc: 6251-573-1-1AI. Edition March 22, 2004.

2. IC1301, TA2024.

TA2024.TRIPATH Technical Information:
STEREO 15W (4Ω) CLASS T™ DIGITAL AUDIO AMPLIFIER USING DIGITAL POWER PROCESSING™ TECHNOLOGY.
Doc: TA2024 –KLI/3.0/08 03. Revision 4.0 - February 2004.
http://www.tripath.com/data.htm

NOTE: It has been specially requested by the Maker including the following information.

©Tripath, 1998-2004.

3. IC2201, PW1306-10QL.

PW1306 Product Specification:
PIXELWORKS.
Doc: P/N 001-0079-00 Rev C. July 2003.

NOTE: It has been specially requested by the Maker including the following information.

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4. IC6004, FRC9429A B1.

FRC 94xxA FAMOUS Micronas Advance Data Sheet:
Frame Rate Converter with Outstanding Performance
Doc: 6251-603-3AI. Edition June 4, 2004.

Notes:

Notes:

SCHEMATIC DIAGRAM

Models LC-26GA5U
LC-32GA5U

CONTENTS

Page
DESCRIPTION OF SCHEMATIC DIAGRAM D2
AV Unit .... D3 ~ D16
CPU Unit ....D17 ~ D26
MAIN Unit ....D27 ~ D48
LCD CONTROL Unit ....D49 ~ D68
KEY Unit ....D69 ~ D70
POWER Unit (LC-26GA5U) ....D71 ~ D72
POWER Unit (LC-32GA5U) ....D73 ~ D74
INVERTER Unit (LC-26GA5U) ....D75 ~ D76
INVERTER GROUND Unit (LC-26GA5U) ....D77 ~ D78
INVERTER-1 Unit (LC-32GA5U) D79
INVERTER-2 Unit (LC-32GA5U) D80
INVERTER GROUND Unit (LC-32GA5U) ....D81 ~ D82
R/C, LED Unit D83

DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. When the exclusive-use AC adapter is used, the colour bar signal of colour bar generator for service is input to get the normal screen. When the audio is minimized, the voltage value is measured with the 20 kΩ/V tester.

WAVEFORM MEASUREMENT CONDITION:

1. When the exclusive-use AC adapter is used, the colour density, lightness and colour hue are set to the center position, and the signal of colour bar generator for service is observed to get waveform.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance “Ω” is omitted.
   (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted.
   (J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are Carbon type, unless otherwise noted.
   Ⓒ: Solid Ⓦ: Cement
   Ⓢ: Oxide Film Ⓣ: Special
   Ⓝ: Metal Coating

CAPACITOR

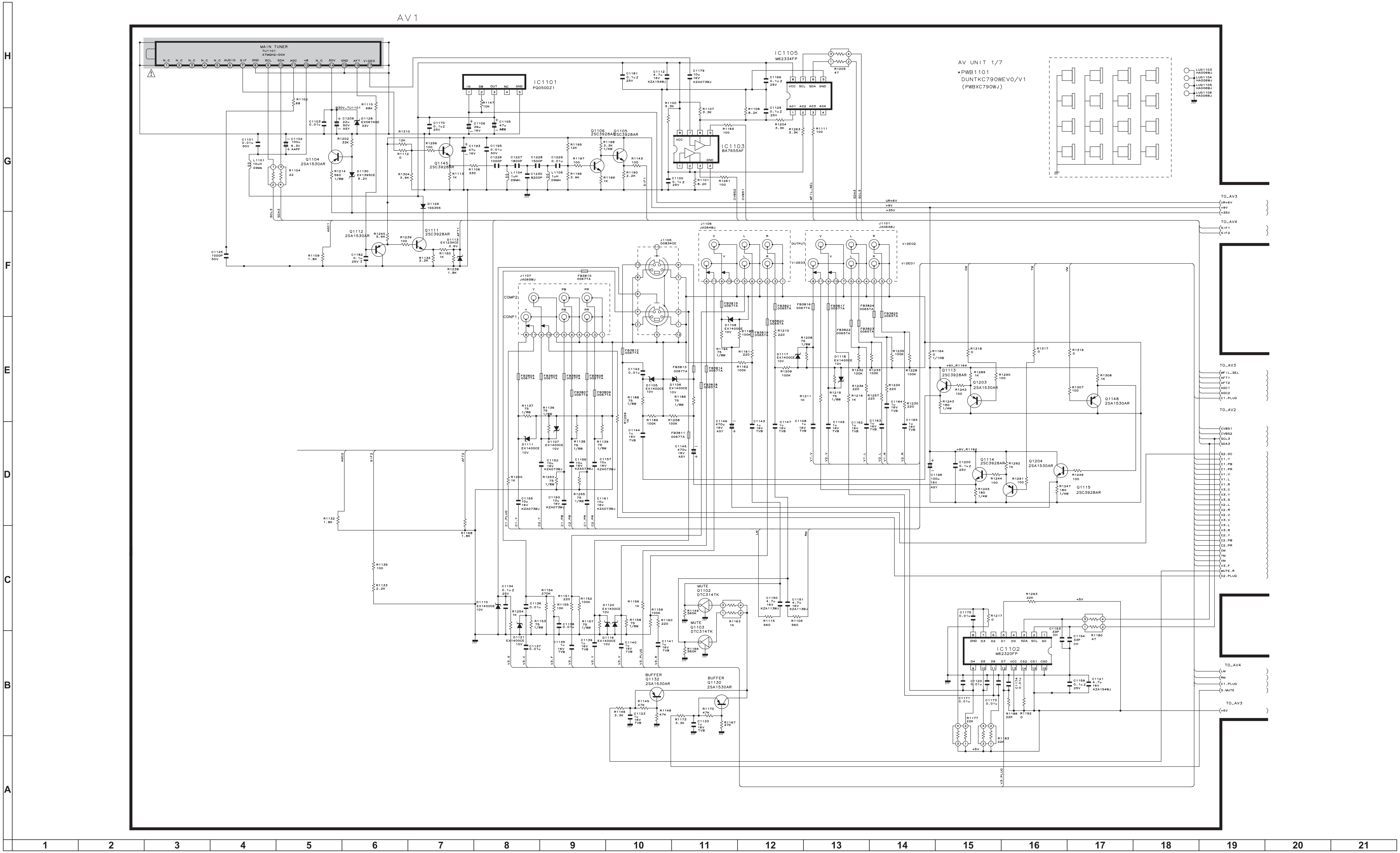
1. All capacitors are mF, unless otherwise noted.
   (P=pF=mmF).
2. All capacitors are Ceramic type, unless otherwise noted.
   (ML) : Mylar (TA) : Tantalum
   (PF) : Polypro Film (ST) : Styrol

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH “⚠” (▨)ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

■AV Unit-1/7


AV1
MAIN TUNER
TU1101
ATMQH2-004
IC1101
PQ050DZ1
IC1105
M62334FP
IC1103
BA7655AF
IC1102
M62320FP
AV UNIT 1/7
*PWB1101
DUNTKC790WEV0/V1
(PWBXC790WJ)
J1106
JA064WJ
J1101
JA064WJ
J1105
D0834CE
J1107
JA065WJ
MUTE
Q1102
DTC314TK
MUTE
Q1103
DTC314TK
BUFFER
Q1132
2SA1530AR
BUFFER
Q1130
2SA1530AR
TO_AV3
TO_AV4
TO_AV2
TO_AV3
TO_AV4
TO_AV3
H
G
F
E
D
C
B
A
1
2
3
4
5
6
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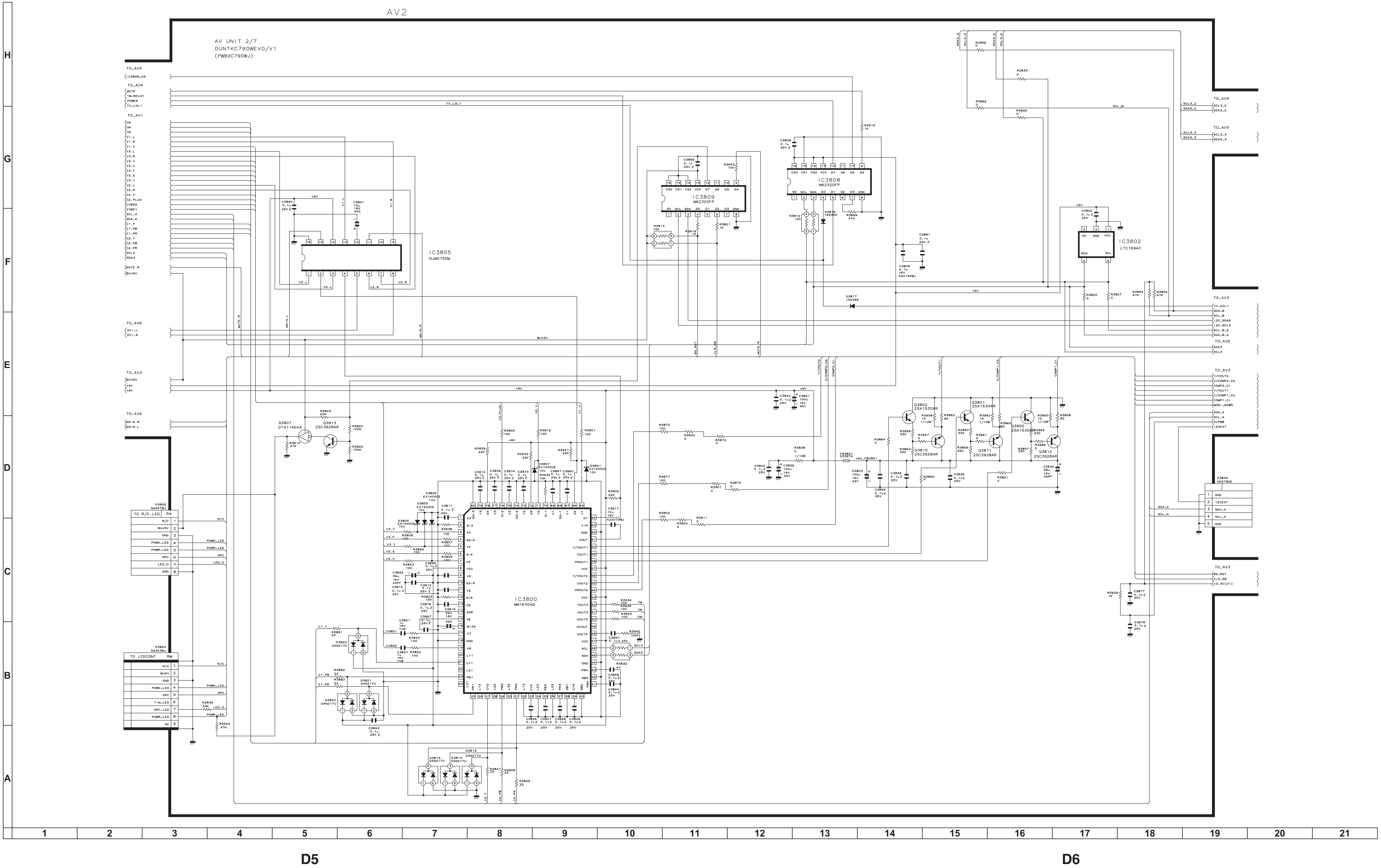
D3

D4

■AV Unit-2/7


AV2
AV UNIT 2/7
DUNTKC790WEV0/V1
(PWBXC790WJ)
TO_AV5
TO_AV4
TO_AV1
TO_AV6
TO_AV3
IC3805
NJM2750M
IC3809
M62320FP
IC3808
M62320FP
IC3802
LTC1694C
IC3800
MM1630AQ
Q3807
DTA114EKA
Q3813
2SC3928AR
Q3802
2SA1530AR
Q3801
2SA1530AR
Q3800
2SA1530AR
Q3810
2SC3928AR
Q3811
2SC3928AR
Q3812
2SC3928AR
P3805
NA04?WJ
TO R/C.LED
P3804
NA343WJ
TO LCDCONT
P3806
N0578GE
D3822
DAN217U
D3821
DAN217U
D3820
DAN217U
D3813
DAN217U
D3814
DAN217U
D3815
DAN217U
FB3801
+9V_FB3801
+9V
+5V
BU+5V
H
G
F
E
D
C
B
A
1
2
3
4
5
6
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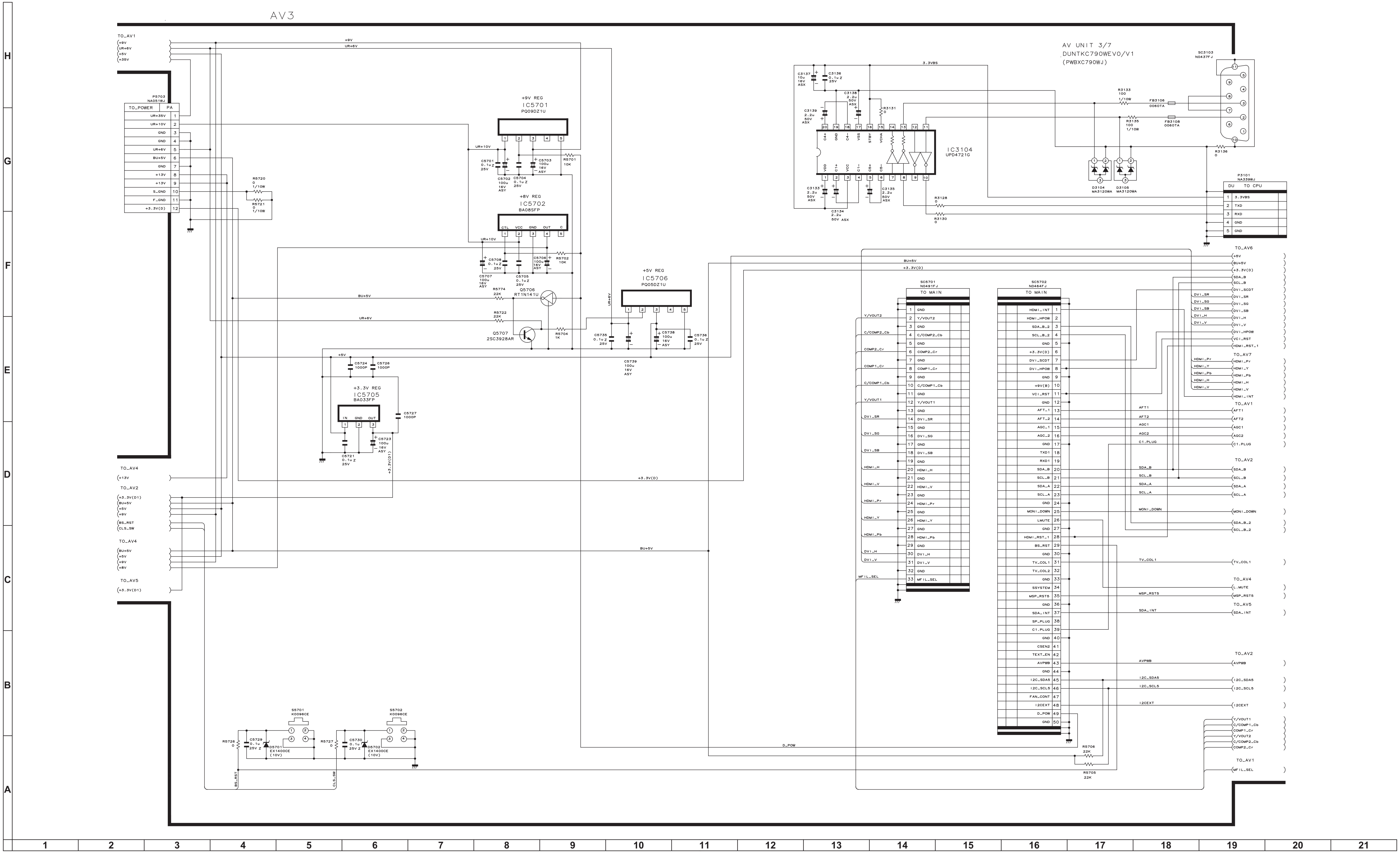
19
20
21
D5
D6

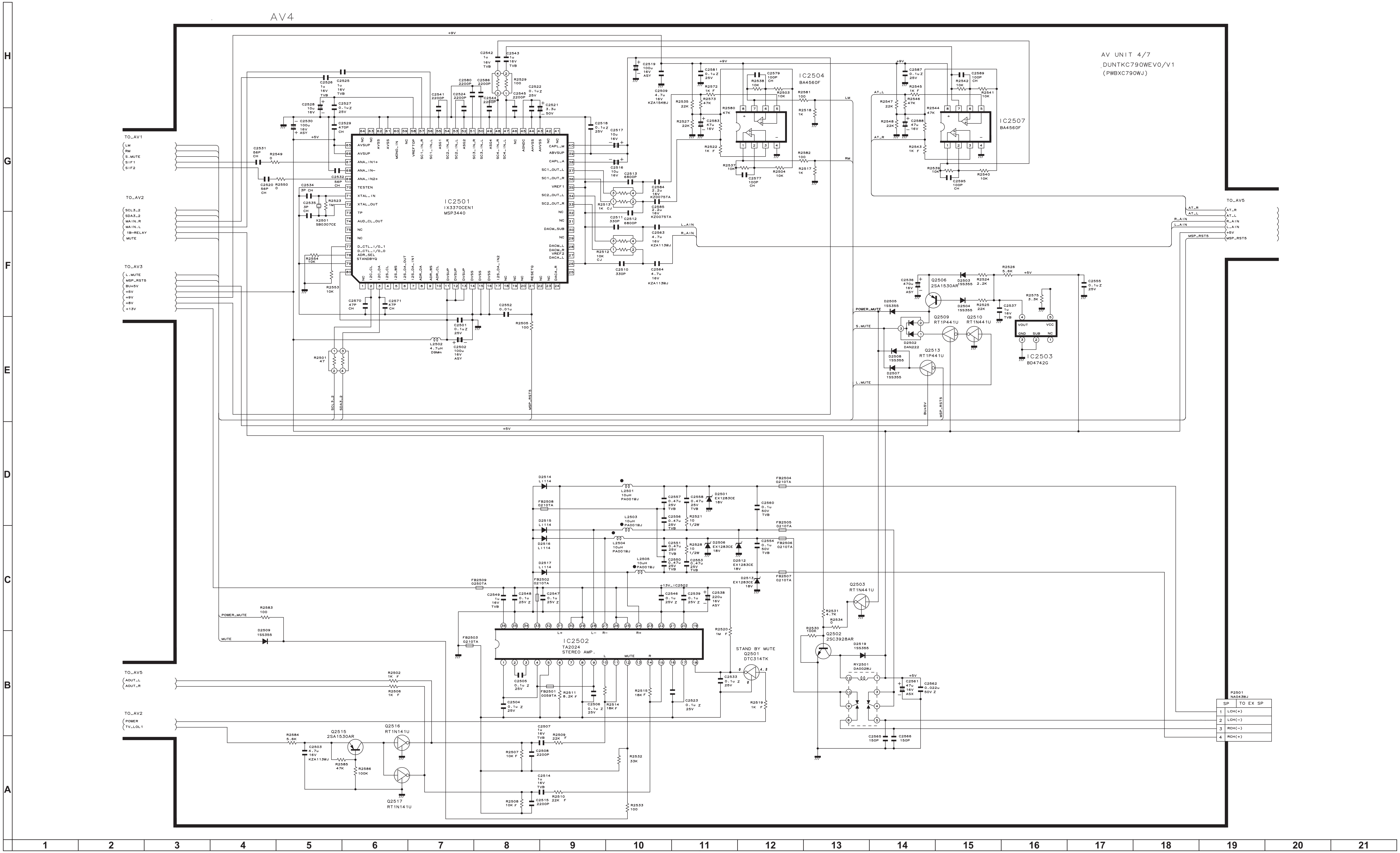
■AV Unit-3/7


AV3
AV UNIT 3/7
DUNTKC790WEV0/V1
(PWBXC790WJ)
TO_AV1
+9V
UR+6V
+5V
+35V
P5703
NA051WJ
TO_POWER
PA
UR+35V
UR+10V
GND
UR+6V
BU+5V
+13V
S_GND
F_GND
+3.3V(D)
R5720
R5721
+9V REG
IC5701
PQ09DZ1U
C5701
C5702
C5703
C5704
R5701
10K
+8V REG
IC5702
BA08SFP
CTL
VCC
GND
OUT
C
C5705
C5706
C5707
C5708
R5702
10K
UR+10V
R5774
22K
Q5706
RT1N141U
R5722
22K
Q5707
2SC3928AR
R5704
1K
+5V REG
IC5706
PQ05DZ1U
C5735
C5736
C5738
C5739
+3.3V REG
IC5705
BA033FP
IN
GND
OUT
C5721
C5723
C5724
C5726
C5727
1000P
IC3104
UPD4721G
3.3VBS
C3133
C3134
C3135
C3136
C3137
C3138
C3139
R3131
R3133
R3135
R3136
R3128
R3130
FB3106
FB3108
0060TA
D3104
D3105
MA3120WA
SC3103
N0437FJ
P3101
NA339WJ
DU
TO CPU
3.3VBS
TXD
RXD
GND
SC5701
N0491FJ
TO MAIN
Y/VOUT2
C/COMP2_Cb
COMP2_Cr
COMP1_Cr
C/COMP1_Cb
Y/VOUT1
DVI_SR
DVI_SG
DVI_SB
HDMI_H
HDMI_V
HDMI_Pr
HDMI_Y
HDMI_Pb
DVI_H
DVI_V
MFIL_SEL
SC5702
N0464FJ
HDMI_INT
HDMI_HPOW
SDA_B_2
SCL_B_2
+3.3V(D)
DVI_SCDT
DVI_HPOW
+9V(B)
VCI_RST
AFT_1
AFT_2
AGC_1
AGC_2
TXD1
RXD1
SDA_B
SCL_B
SDA_A
SCL_A
MONI_DOWN
LMUTE
HDMI_RST_1
BS_RST
TV_COL1
TV_COL2
SSYSTEM
MSP_RST5
SDA_INT
SP_PLUG
C1_PLUG
CSEN2
TEXT_EN
AVPWB
I2C_SDA5
I2C_SCL5
FAN_CONT
I2CEXT
D_POW
TO_AV6
TO_AV7
TO_AV2
TO_AV4
TO_AV5
TO_AV1
R5705
R5706
22K
S5701
S5702
K0096CE
R5726
R5727
C5729
C5730
D5701
D5702
EX1400CE
(10V)
BS_RST
CLS_SW
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
H G F E D C B A

D7

D8

■AV Unit-4/7


AV4
AV UNIT 4/7
DUNTKC790WEV0/V1
(PWBXC790WJ)
IC2501
IX3370CEN1
MSP3440
IC2504
BA4560F
IC2507
BA4560F
IC2503
BD4742G
IC2502
TA2024
STEREO AMP.
STAND BY MUTE
Q2501
DTC314TK
Q2502
2SC3928AR
Q2503
RT1N441U
Q2506
2SA1530AR
Q2509
RT1P441U
Q2510
RT1N441U
Q2513
RT1P441U
Q2515
2SA1530AR
Q2516
RT1N141U
Q2517
RT1N141U
RY2501
DA002WJ
P2501
NA043WJ
SP
TO EX SP
LCH(+)
LCH(-)
RCH(-)
RCH(+)
TO_AV1
LM
RM
S_MUTE
SIF1
SIF2
TO_AV2
SCL3_2
SDA3_2
MAIN_R
MAIN_L
1B-RELAY
MUTE
TO_AV3
L_MUTE
MSP_RST5
BU+5V
+5V
+9V
+8V
+13V
TO_AV5
AT_R
AT_L
R_AIN
L_AIN
+5V
MSP_RST5
TO_AV5
AOUT_L
AOUT_R
TO_AV2
POWER
TV_LOL1
POWER_MUTE
S_MUTE
L_MUTE
+9V
+5V
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
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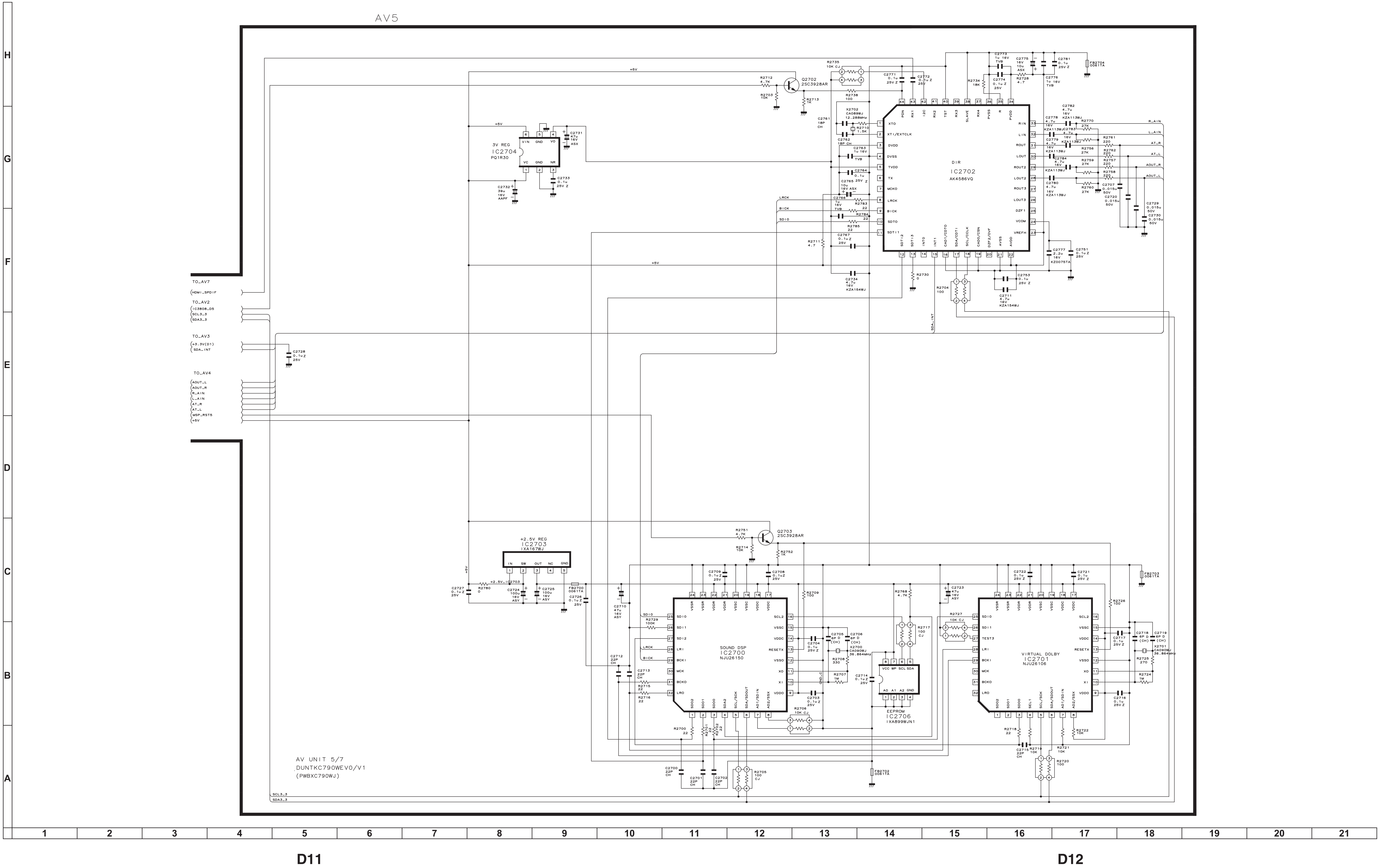
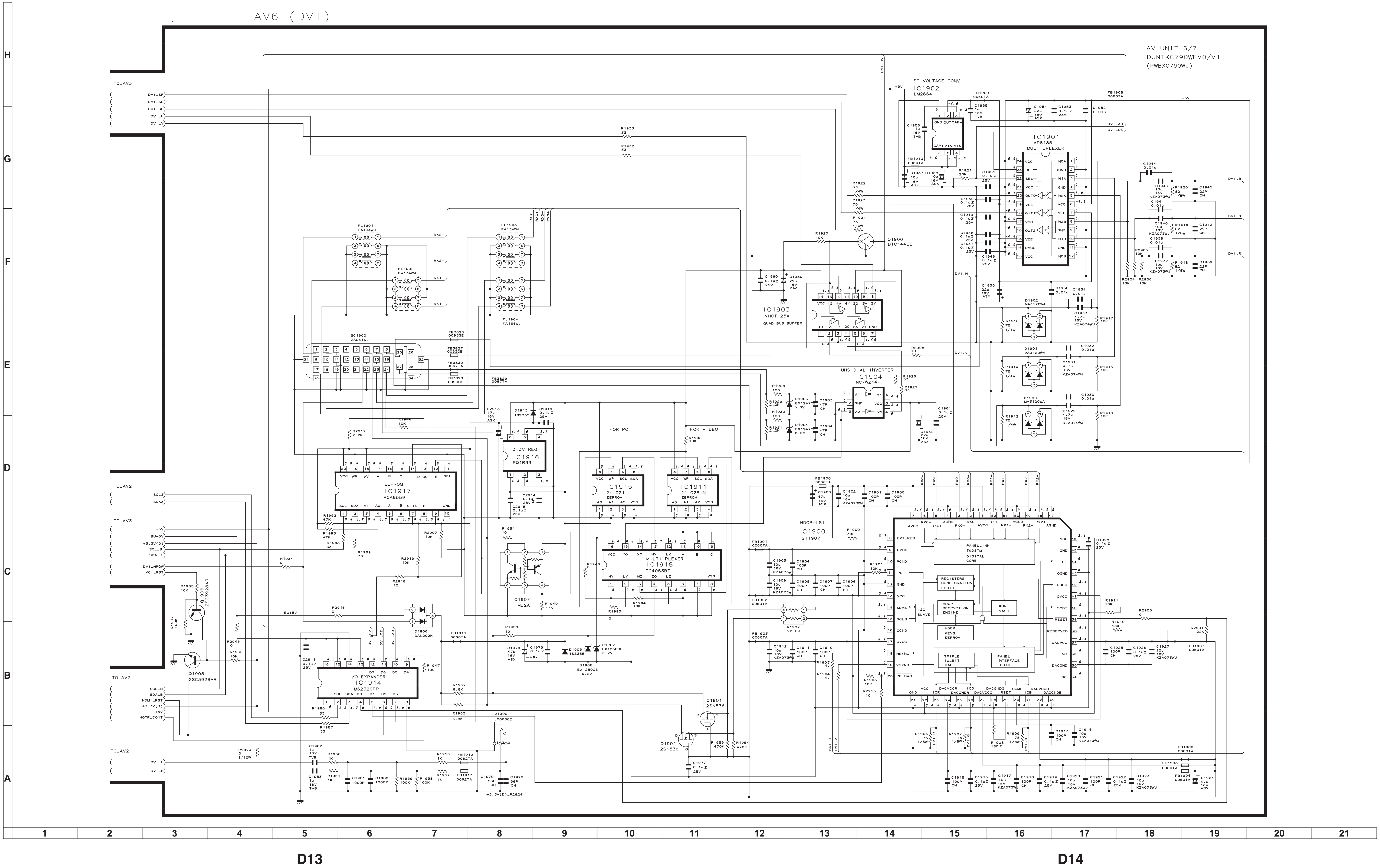
D9

D10

■AV Unit-5/7


AV5
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
TO_AV7
HDMI_SPDIF
TO_AV2
IC3808_D5
SCL3_3
SDA3_3
TO_AV3
+3.3V(D1)
SDA_INT
TO_AV4
AOUT_L
AOUT_R
R_AIN
L_AIN
AT_R
AT_L
MSP_RST5
+5V
3V REG
IC2704
PQ1R30
Q2702
2SC3928AR
DIR
IC2702
AK4586VQ
X2702
CA089WJ
12.288MHz
R_AIN
L_AIN
AT_R
AT_L
AOUT_R
AOUT_L
LRCK
BICK
SDI0
SDA_INT
Q2703
2SC3928AR
+2.5V REG
IC2703
IXA167WJ
SOUND DSP
IC2700
NJU26150
X2700
CA090WJ
36.864MHz
EEPROM
IC2706
IXA899WJN1
VIRTUAL DOLBY
IC2701
NJU26106
X2701
CA090WJ
36.864MHz
AV UNIT 5/7
DUNTKC790WEV0/V1
(PWBXC790WJ)
SCL3_3
SDA3_3
D11
D12

■AV Unit-6/7


AV6 (DVI)
AV UNIT 6/7
DUNTKC790WEV0/V1
(PWBXC790WJ)
TO_AV3
DVI_SR
DVI_SG
DVI_SB
DVI_H
DVI_V
SC VOLTAGE CONV
IC1902
LM2664
IC1901
AD8185
MULTI_PLEXER
IC1903
VHCT125A
QUAD BUS BUFFER
Q1900
DTC144EE
FL1901
FA134WJ
FL1902
FA134WJ
FL1903
FA134WJ
FL1904
FA134WJ
SC1900
ZA061WJ
UHS DUAL INVERTER
IC1904
NC7WZ14P
D1902
MA3120WA
D1901
MA3120WA
D1900
MA3120WA
DVI_B
DVI_G
DVI_R
DVI_AD
DVI_OE
+5V
3.3V REG
IC1916
PQ1R33
EEPROM
IC1917
PCA9559
FOR PC
FOR VIDEO
IC1915
24LC21
EEPROM
IC1911
24LC21BIN
EEPROM
MULTI PLEXER
IC1918
TC4053BT
HDCP-LSI
IC1900
SII907
PANELLINK
TMDSTM
DIGITAL
CORE
REGISTERS
CONFIGURATION
LOGIC
HDCP
DECRYPTION
ENGINE
XOR
MASK
I2C
SLAVE
HDCP
KEYS
EEPROM
TRIPLE
10_BIT
DAC
PANEL
INTERFACE
LOGIC
Q1907
IMD2A
TO_AV2
SCL3
SDA3
TO_AV3
+5V
BU+5V
+3.3V(D)
SCL_B
SDA_B
DVI_HPOW
VCI_RST
Q1906
2SC3928AR
Q1905
2SC3928AR
BU+5V
D1906
DAN202K
D1913
1SS355
D1905
1SS355
D1907
EX1250CE
6.2V
D1908
EX1250CE
6.2V
D1903
EX1247CE
5.6V
D1904
EX1247CE
5.6V
I/O EXPANDER
IC1914
M62320FP
TO_AV7
SCL_B
SDA_B
HDMI_RST
+3.3V(D)
+5V
HOTP_CONT
J1900
Q1901
2SK536
Q1902
2SK536
TO_AV2
DVI_L
DVI_R
+3.3V(D)_R2924
H
G
F
E
D
C
B
A
1
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3
4
5
6
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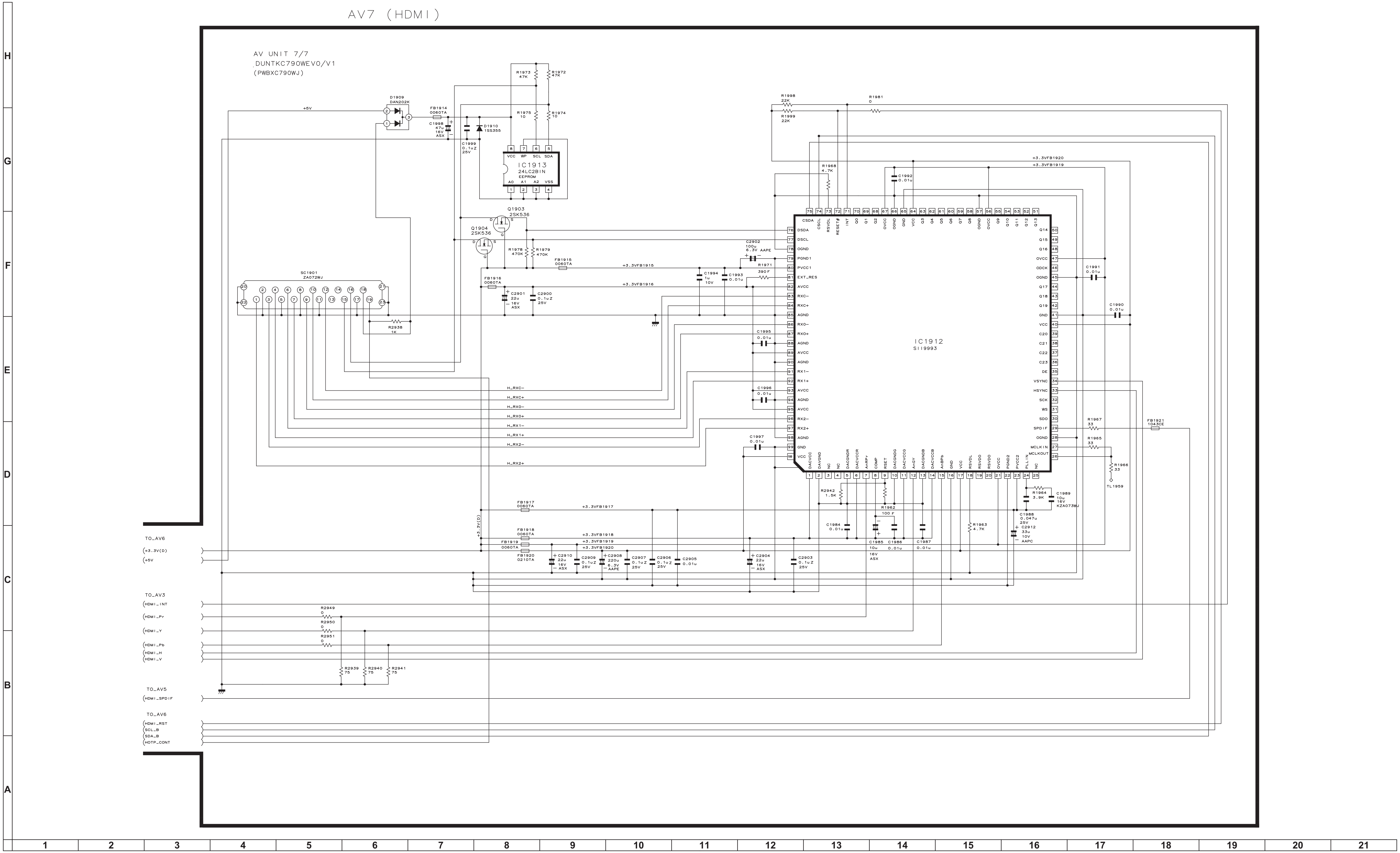
D13
D14

■AV Unit-7/7


AV7 (HDMI)
AV UNIT 7/7
DUNTKC790WEV0/V1
(PWBXC790WJ)
IC1913
24LC21N
EEPROM
IC1912
SII9993
Q1903
2SK536
Q1904
2SK536
D1909
DAN202K
D1910
1SS355
SC1901
ZA072WJ
FB1914
FB1915
FB1916
FB1917
FB1918
FB1919
FB1920
FB1921
+5V
+3.3VFB1915
+3.3VFB1916
+3.3VFB1917
+3.3VFB1918
+3.3VFB1919
+3.3VFB1920
+3.3V(D)
H_RXC-
H_RXC+
H_RX0-
H_RX0+
H_RX1-
H_RX1+
H_RX2-
H_RX2+
TO_AV6
(+3.3V(D)
(+5V
TO_AV3
(HDMI_INT
(HDMI_Pr
(HDMI_Y
(HDMI_Pb
(HDMI_H
(HDMI_V
TO_AV5
(HDMI_SPDIF
TO_AV6
(HDMI_RST
(SCL_B
(SDA_B
(HOTP_CONT
TL1959
H
G
F
E
D
C
B
A
1
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3
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6
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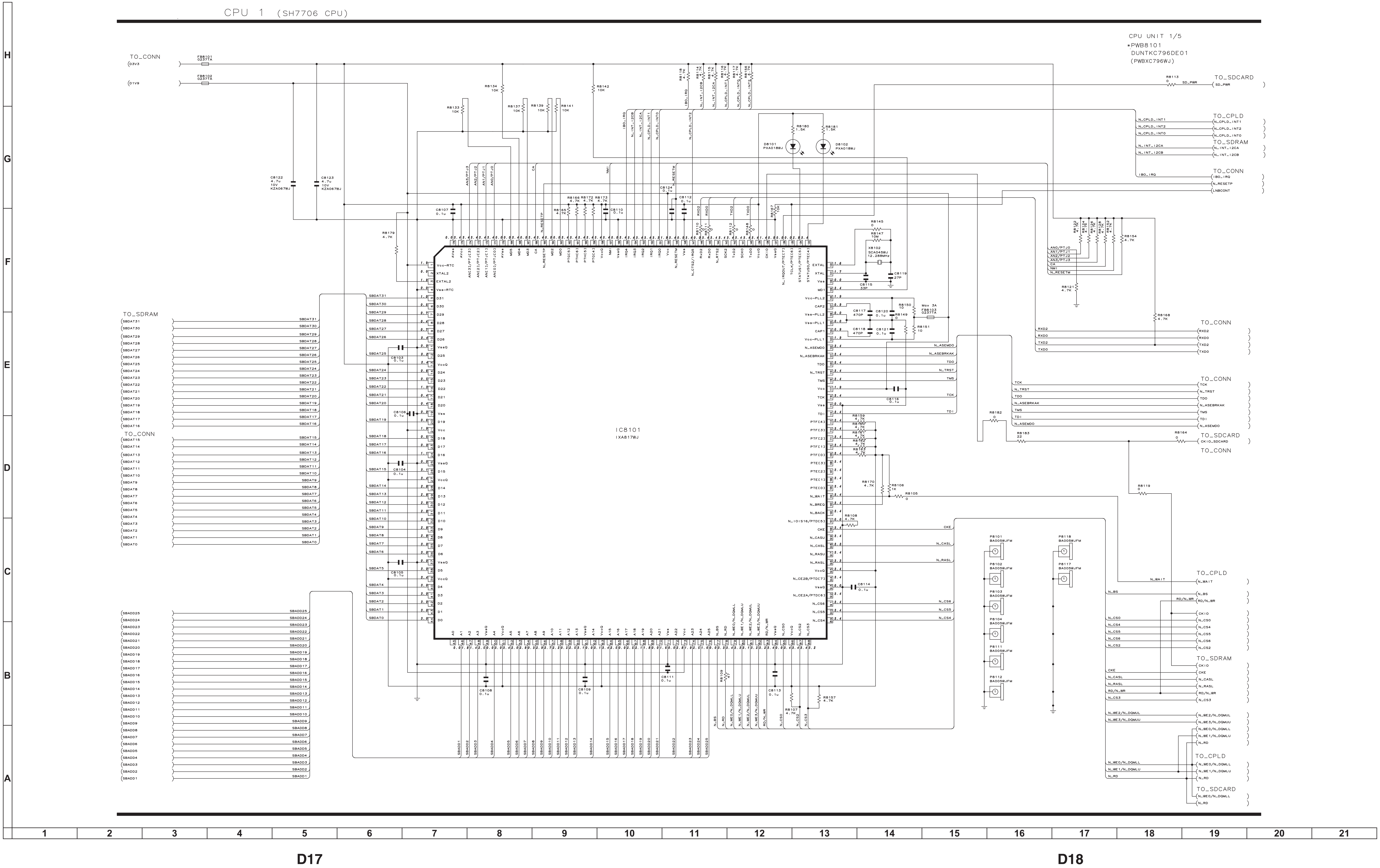
D15

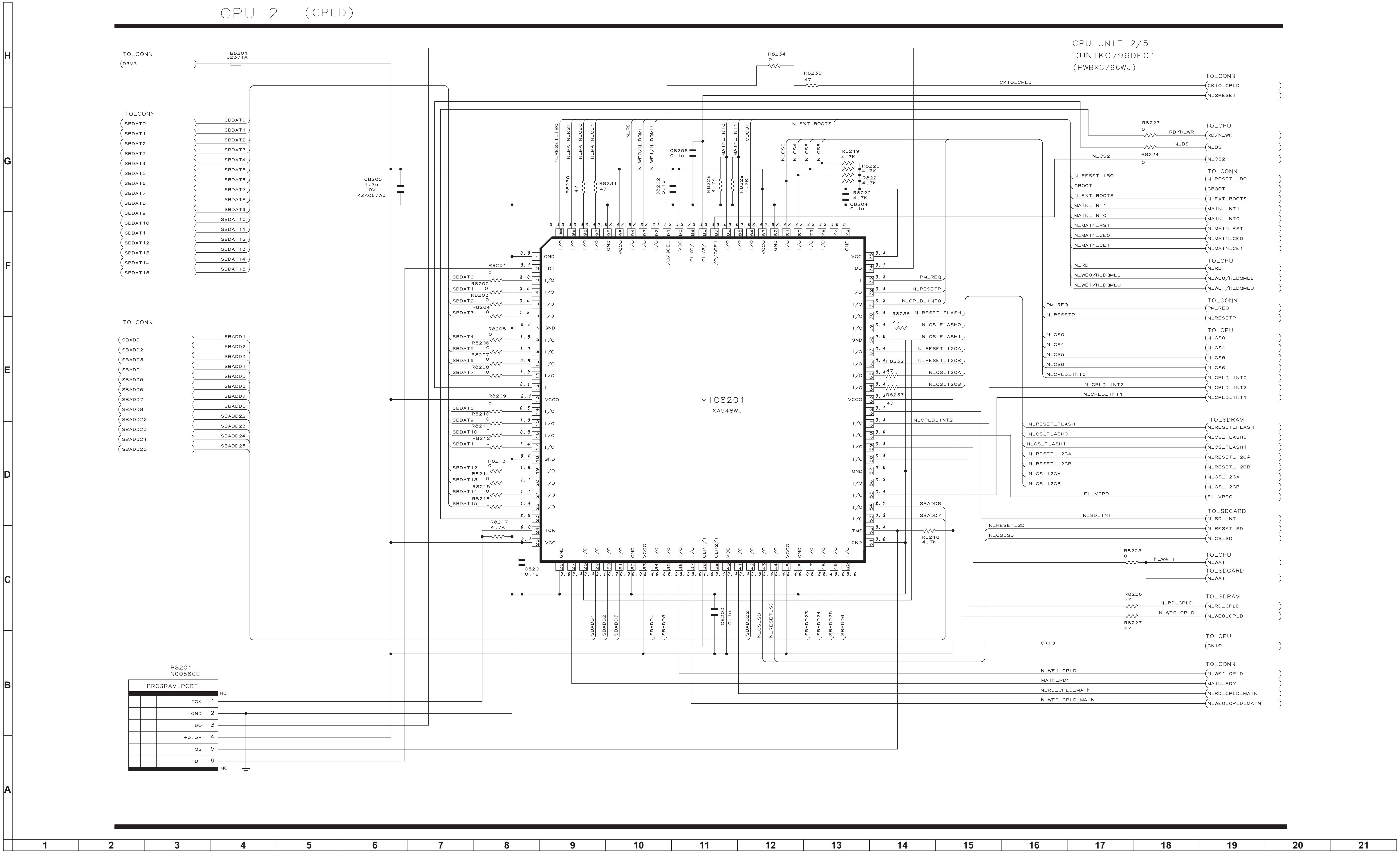
D16

■CPU Unit-1/5



CPU 1 (SH7706 CPU)
CPU UNIT 1/5
*PWB8101
DUNTKC796DE01
(PWBXC796WJ)
IC8101
IXA817WJ
TO_CONN
(D3V3
(D1V9
FB8101 0237TA
FB8102 0237TA
FB8103 0237TA
C8122 4.7u 10V KZA067WJ
C8123 4.7u 10V KZA067WJ
R8134 10K
R8133 10K
R8137 10K
R8139 10K
R8141 10K
R8142 10K
R8179 4.7K
R8118 4.7K
R8114 4.7K
R8115 4.7K
R8116 4.7K
R8117 4.7K
R8156 4.7K
R8180 1.5K
R8181 1.5K
D8101 PXA018WJ
D8102 PXA018WJ
X8102 SCA045WJ 12.288MHz
R8145 0
R8147 10M
C8115 33P
C8119 27P
C8117 470P
C8118 470P
C8120 0.1u
C8121 0.1u
R8150 10
R8149 0
R8151 10
Max 3A
R8121 4.7K
R8122 4.7K
R8124 4.7K
R8126 4.7K
R8132 4.7K
R8154 4.7K
R8168 4.7K
R8113 0
R8182 0
R8183 22
R8164 0
R8119 0
R8170 4.7K
R8106 1K
R8105 0
R8108 4.7K
R8109
R8107 4.7K
R8157 4.7K
R8159 4.7K
R8160 4.7K
R8161 4.7K
R8162 4.7K
R8163 4.7K
R8165 4.7K
R8166 4.7K
R8172 4.7K
R8173 4.7K
R8187 10K
C8107 0.1u
C8110 0.1u
C8124 0.1u
C8112 0.1u
C8103 0.1u
C8106 0.1u
C8104 0.1u
C8105 0.1u
C8108 0.1u
C8109 0.1u
C8111 0.1u
C8113 0.1u
C8114 0.1u
C8116 0.1u
P8101 BA005WJFM
P8102 BA005WJFM
P8103 BA005WJFM
P8104 BA005WJFM
P8111 BA005WJFM
P8112 BA005WJFM
P8116 BA005WJFM
P8117 BA005WJFM
TO_SDCARD
SD_PWR
TO_CPLD
N_CPLD_INT1
N_CPLD_INT2
N_CPLD_INT0
TO_SDRAM
N_INT_I2CA
N_INT_I2CB
IBO_IRQ
N_RESETP
LNBCONT
RXD2
RXD0
TXD2
TXD0
TCK
N_TRST
TDO
N_ASEBRKAK
TMS
TDI
N_ASEMDO
CKIO_SDCARD
N_WAIT
N_BS
RD/N_WR
CKIO
N_CS0
N_CS4
N_CS5
N_CS6
N_CS2
N_CS3
CKE
N_CASL
N_RASL
N_WE2/N_DQMUL
N_WE3/N_DQMUU
N_WE0/N_DQMLL
N_WE1/N_DQMLU
N_RD
AN0/PTJ0
AN1/PTJ1
AN2/PTJ2
AN3/PTJ3
CA
NMI
N_RESETM
SBDAT31 … SBDAT0
SBADD25 … SBADD1
AVss AVcc AN3/PTJ3 AN2/PTJ2 AN1/PTJ1 AN0/PTJ0 AVss MD4 MD3 CA N_RESETP MD2 MD0 PTG[5] PTH[5] PTG[5] PTG[4] VccQ NMI VssQ IRQ4 IRQ3 IRQ2 IRQ1 IRQ0 Vcc N_RESETM Vss N_CTS2/IRQ5 RxD2 RxD0 N_RTS2 SCK2 TxD2 SCK0 TxD0 VccQ CKIO VssQ N_IRQOUT/PTE[7] TCLK/PTE[6] STATUS1/PTE[5] STATUS0/PTE[4]
Vcc-RTC XTAL2 EXTAL2 Vss-RTC D31 D30 D29 D28 D27 D26 VssQ D25 VccQ D24 D23 D22 D21 D20 Vss D19 Vcc D18 D17 D16 VssQ D15 VccQ D14 D13 D12 D11 D10 D9 D8 D7 D6 VssQ D5 VccQ D4 D3 D2 D1 D0
EXTAL XTAL Vss MD1 Vcc-PLL2 CAP2 Vss-PLL2 Vss-PLL1 CAP1 Vcc-PLL1 N_ASEMDO N_ASEBRKAK TDO N_TRST TMS Vcc TCK Vss TDI PTF[4] PTF[3] PTF[2] PTF[1] PTF[0] PTE[3] PTE[2] PTE[1] PTE[0] N_WAIT N_BREQ N_BACK N_IOIS16/PTD[5] CKE N_CASU N_CASL N_RASU N_RASL VccQ N_CE2B/PTD[7] VssQ N_CE2A/PTD[6] N_CS6 N_CS5 N_CS4
A0 A1 A2 A3 VssQ A4 VccQ A5 A6 A7 A8 A9 A10 A11 A12 A13 VssQ A14 VccQ A15 A16 A17 A18 A19 A20 A21 Vss A22 Vcc A23 A24 A25 N_BS N_RD N_WE0/N_DQMLL N_WE1/N_DQMLU N_WE2/N_DQMUL N_WE3/N_DQMUU RD/N_WR VssQ N_CS0 VccQ N_CS2 N_CS3
H G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
D17
D18

■CPU Unit-2/5



CPU 2 (CPLD)
CPU UNIT 2/5
DUNTKC796DE01
(PWBXC796WJ)
TO_CONN
D3V3
FB8201
0237TA
SBDAT0
SBDAT1
SBDAT2
SBDAT3
SBDAT4
SBDAT5
SBDAT6
SBDAT7
SBDAT8
SBDAT9
SBDAT10
SBDAT11
SBDAT12
SBDAT13
SBDAT14
SBDAT15
SBADD1
SBADD2
SBADD3
SBADD4
SBADD5
SBADD6
SBADD7
SBADD8
SBADD22
SBADD23
SBADD24
SBADD25
C8205
4.7u
10V
KZA067WJ
*IC8201
IXA948WJ
C8201
0.1u
C8202
0.1u
C8203
0.1u
C8204
0.1u
C8206
0.1u
R8201
R8202
R8203
R8204
R8205
R8206
R8207
R8208
R8209
R8210
R8211
R8212
R8213
R8214
R8215
R8216
R8217
4.7K
R8218
4.7K
R8219
4.7K
R8220
4.7K
R8221
4.7K
R8222
4.7K
R8223
R8224
R8225
R8226
47
R8227
47
R8228
4.7K
R8229
4.7K
R8230
47
R8231
47
R8232
47
R8233
47
R8234
R8235
47
R8236
47
N_RESET_IBO
N_MAIN_RST
N_MAIN_CE0
N_MAIN_CE1
N_RD
N_WE0/N_DQMLL
N_WE1/N_DQMLU
MAIN_INT0
MAIN_INT1
CBOOT
N_EXT_BOOTS
N_CS0
N_CS4
N_CS5
N_CS6
CKIO_CPLD
N_SRESET
TO_CPU
RD/N_WR
N_BS
N_CS2
PM_REQ
N_RESETP
N_CPLD_INT0
N_CPLD_INT1
N_CPLD_INT2
N_RESET_FLASH
N_CS_FLASH0
N_CS_FLASH1
N_RESET_I2CA
N_RESET_I2CB
N_CS_I2CA
N_CS_I2CB
TO_SDRAM
FL_VPPO
TO_SDCARD
N_SD_INT
N_RESET_SD
N_CS_SD
N_WAIT
N_RD_CPLD
N_WE0_CPLD
CKIO
N_WE1_CPLD
MAIN_RDY
N_RD_CPLD_MAIN
N_WE0_CPLD_MAIN
GND
VCC
VCCO
TDI
TDO
TCK
TMS
I/O
CLK0/I
CLK1/I
CLK2/I
CLK3/I
I/O/GOE0
I/O/GOE1
P8201
N0056CE
PROGRAM_PORT
NC
TCK 1
GND 2
TDO 3
+3.3V 4
TMS 5
TDI 6
NC
H
G
F
E
D
C
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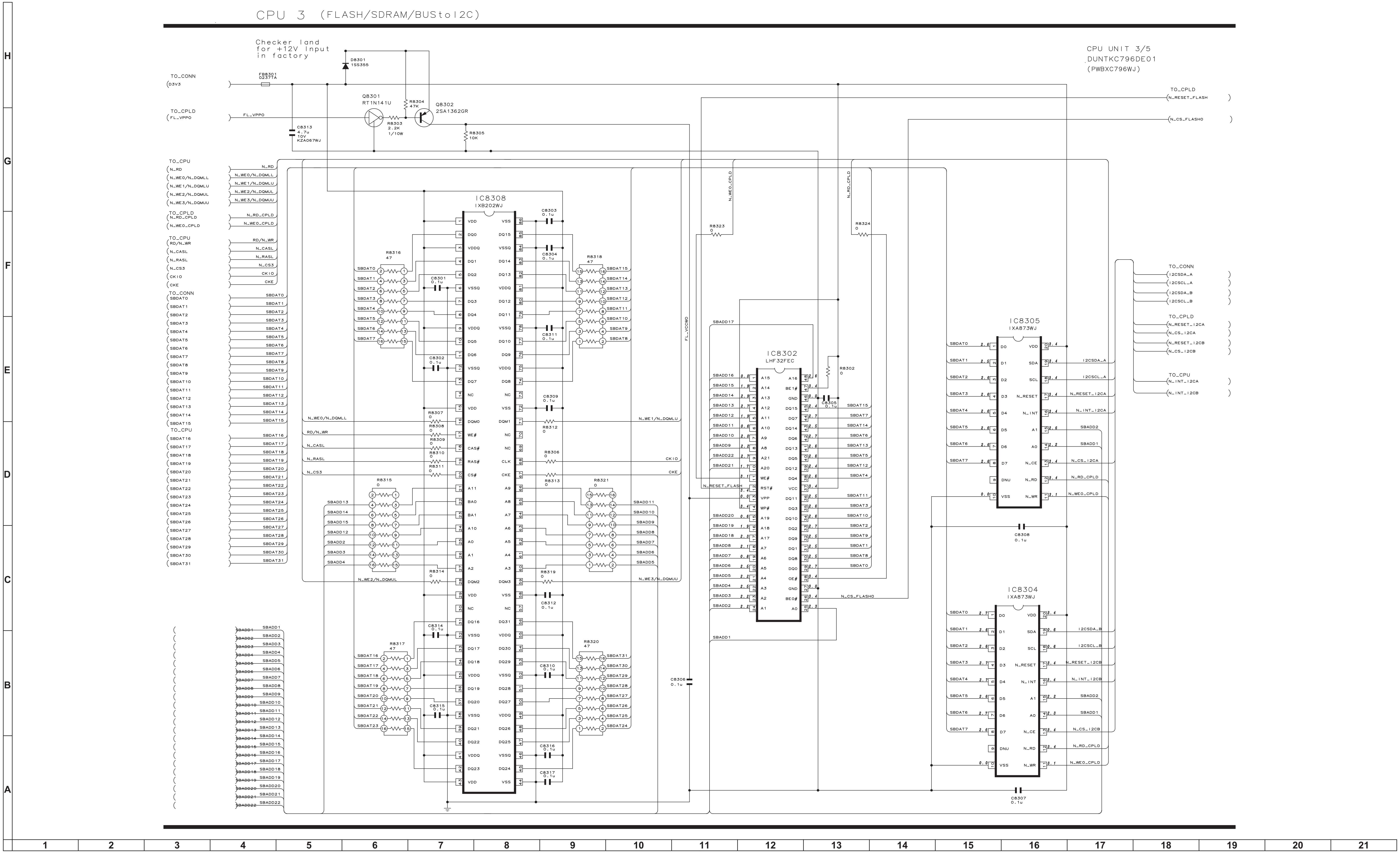
D19

D20

■CPU Unit-3/5


CPU 3 (FLASH/SDRAM/BUStoI2C)
CPU UNIT 3/5
DUNTKC796DE01
(PWBXC796WJ)
Checker land for +12V Input in factory
TO_CONN
D3V3
FB8301 0237TA
D8301 1SS355
Q8301 RT1N141U
R8304 47K
Q8302 2SA1362GR
R8303 2.2K 1/10W
R8305 10K
C8313 4.7u 10V KZA067WJ
TO_CPLD
FL_VPPO
TO_CPU
N_RD
N_WE0/N_DQMLL
N_WE1/N_DQMLU
N_WE2/N_DQMUL
N_WE3/N_DQMUU
N_RD_CPLD
N_WE0_CPLD
RD/N_WR
N_CASL
N_RASL
N_CS3
CKIO
CKE
SBDAT0 … SBDAT31
SBADD1 … SBADD22
IC8308
IXB202WJ
C8303 0.1u
C8304 0.1u
C8301 0.1u
C8302 0.1u
C8309 0.1u
C8311 0.1u
C8312 0.1u
C8314 0.1u
C8315 0.1u
C8310 0.1u
C8316 0.1u
C8317 0.1u
R8316 47
R8318 47
R8317 47
R8320 47
R8315 0
R8321 0
R8307 0
R8308 0
R8309 0
R8310 0
R8311 0
R8312 0
R8306 0
R8313 0
R8314 0
R8319 0
IC8302
LHF32FEC
R8323 0
R8324 0
R8302 0
C8305 0.1u
C8306 0.1u
N_WE0_CPLD
N_RD_CPLD
FL_VCCW0
N_RESET_FLASH
N_CS_FLASH0
IC8305
IXA873WJ
IC8304
IXA873WJ
C8308 0.1u
C8307 0.1u
I2CSDA_A
I2CSCL_A
N_RESET_I2CA
N_INT_I2CA
N_CS_I2CA
I2CSDA_B
I2CSCL_B
N_RESET_I2CB
N_INT_I2CB
N_CS_I2CB
N_RESET_I2CA
N_CS_I2CA
N_RESET_I2CB
N_CS_I2CB
N_INT_I2CA
N_INT_I2CB
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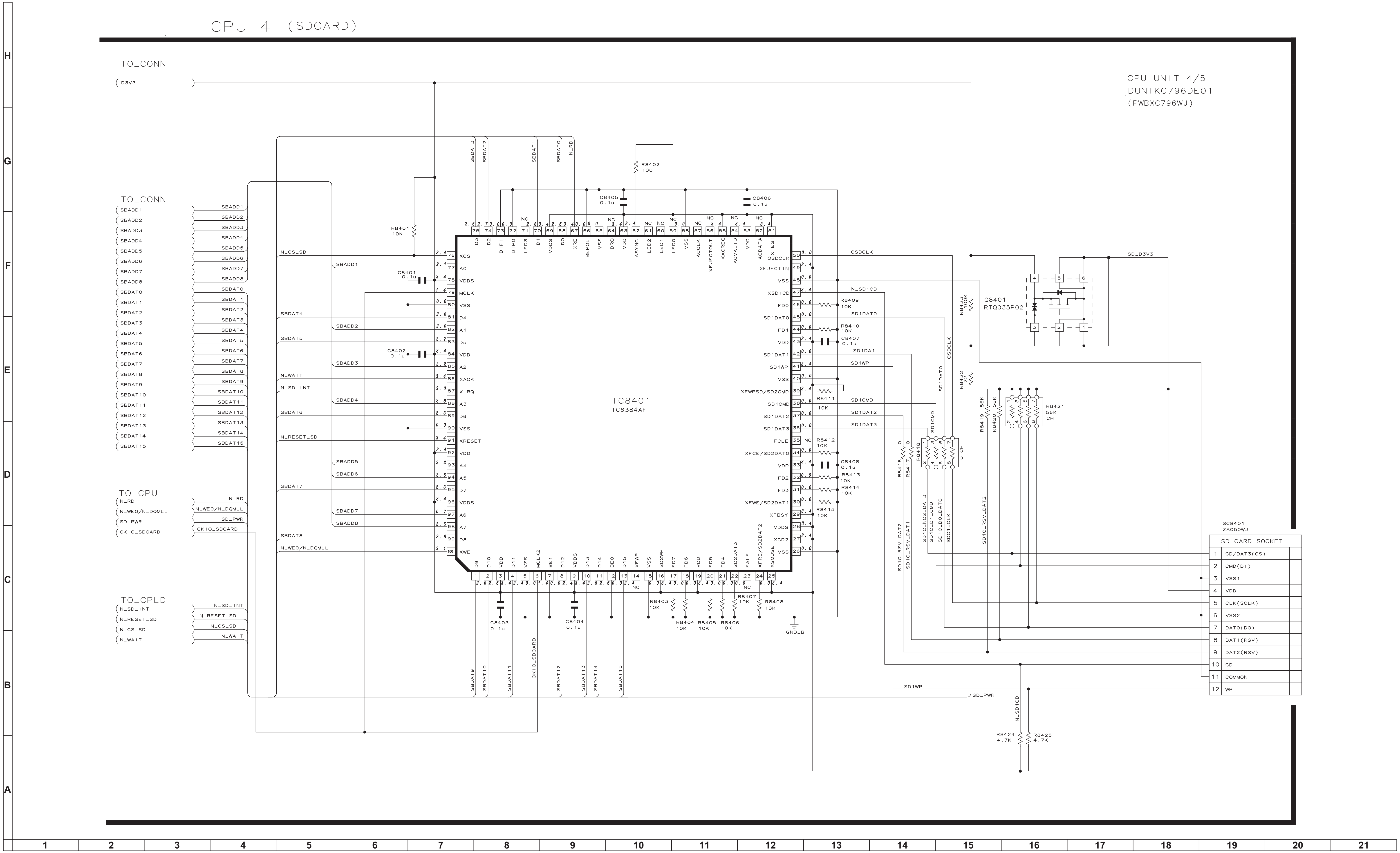
D21

D22

■CPU Unit-4/5


CPU 4 (SDCARD)
CPU UNIT 4/5
DUNTKC796DE01
(PWBXC796WJ)
TO_CONN
D3V3
SBADD1
SBADD2
SBADD3
SBADD4
SBADD5
SBADD6
SBADD7
SBADD8
SBDAT0
SBDAT1
SBDAT2
SBDAT3
SBDAT4
SBDAT5
SBDAT6
SBDAT7
SBDAT8
SBDAT9
SBDAT10
SBDAT11
SBDAT12
SBDAT13
SBDAT14
SBDAT15
TO_CPU
N_RD
N_WEO/N_DQMLL
SD_PWR
CKIO_SDCARD
TO_CPLD
N_SD_INT
N_RESET_SD
N_CS_SD
N_WAIT
IC8401
TC6384AF
R8401 10K
R8402 100
C8401 0.1u
C8402 0.1u
C8403 0.1u
C8404 0.1u
C8405 0.1u
C8406 0.1u
C8407 0.1u
C8408 0.1u
R8403 10K
R8404 10K
R8405 10K
R8406 10K
R8407 10K
R8408 10K
R8409 10K
R8410 10K
R8411 10K
R8412 10K
R8413 10K
R8414 10K
R8415 10K
R8416 0
R8417 0
R8418 0 CH
R8419 56K
R8420 56K
R8421 56K CH
R8422 22
R8423 100K
R8424 4.7K
R8425 4.7K
Q8401
RTQ035P02
SD_D3V3
OSDCLK
N_SD1CD
SD1DAT0
SD1DA1
SD1WP
SD1CMD
SD1DAT2
SD1DAT3
SD1C_NCS_DAT3
SD1C_DI_CMD
SD1C_DO_DAT0
SDC1_CLK
SD1C_RSV_DAT1
SD1C_RSV_DAT2
GND_B
NC
SC8401
ZA050WJ
SD CARD SOCKET
1 CD/DAT3(CS)
2 CMD(DI)
3 VSS1
4 VDD
5 CLK(SCLK)
6 VSS2
7 DAT0(DO)
8 DAT1(RSV)
9 DAT2(RSV)
10 CD
11 COMMON
12 WP
XCS
A0
VDDS
MCLK
VSS
D4
A1
D5
VDD
A2
XACK
XIRQ
A3
D6
XRESET
A4
A5
D7
A6
A7
D8
XWE
OSDCLK
XEJECTIN
XSD1CD
FD0
SD1DAT0
FD1
SD1DAT1
SD1WP
XFWPSD/SD2CMD
SD1CMD
SD1DAT2
SD1DAT3
FCLE
XFCE/SD2DAT0
FD2
FD3
XFWE/SD2DAT1
XFBSY
XCD2
D3
D2
DIP1
DIP0
LED3
D1
D0
XRE
BEPOL
DRQ
ASYNC
LED2
LED1
LED0
ACCLK
XEJECTOUT
XACREQ
ACVALID
ACDATA
XTEST
D9
D10
D11
MCLK2
BE1
D12
D13
D14
BE0
D15
XFWP
SD2WP
FD7
FD6
FD5
FD4
SD2DAT3
FALE
XFRE/SD2DAT2
XSMUSE
H
G
F
E
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C
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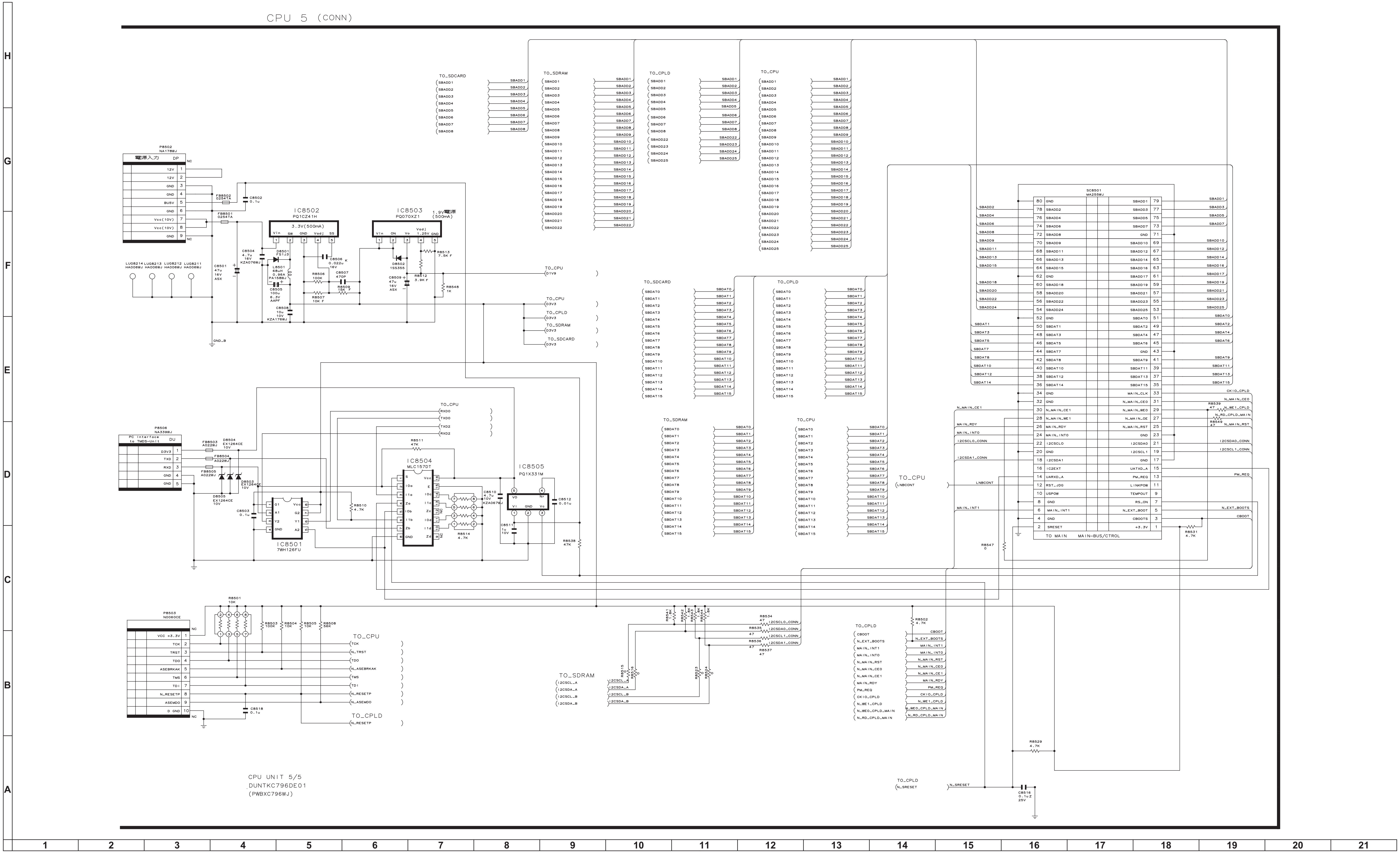
D24

■CPU Unit-5/5


CPU 5 (CONN)
P8502
NA178WJ
電源入力
12V
GND
BU5V
Vcc(10V)
IC8502
PQ1CZ41H
3.3V(500mA)
IC8503
PQ070XZ1
1.9V電源 (500mA)
TO_CPU
D1V9
D3V3
TO_CPLD
TO_SDRAM
TO_SDCARD
LUG8214 LUG8213 LUG8212 LUG8211
HA006WJ
GND_B
P8506
NA339WJ
PC Interface to TMDS-Unit
TXD
RXD
RXD0
TXD0
TXD2
RXD2
IC8501
7WH126FU
IC8504
MLC157DT
IC8505
PQ1X331M
P8503
N0060CE
VCC +3.3V
TCK
TRST
TDO
ASEBRKAK
TMS
TDI
N_RESETP
ASEMDO
D GND
N_TRST
N_ASEBRKAK
SBADD1
SBADD25
SBDAT0
SBDAT15
SC8501
MA255WJ
TO MAIN MAIN-BUS/CTROL
N_MAIN_CE1
N_MAIN_WE1
MAIN_RDY
MAIN_INT0
MAIN_INT1
I2CSCL0_CONN
I2CSDA0_CONN
I2CSCL1_CONN
I2CSDA1_CONN
LNBCONT
N_EXT_BOOTS
CBOOT
PM_REQ
CK10_CPLD
N_WE0_CPLD_MAIN
N_RD_CPLD_MAIN
N_SRESET
I2CSCL_A
I2CSDA_A
I2CSCL_B
I2CSDA_B
CPU UNIT 5/5
DUNTKC796DE01
(PWBXC796WJ)
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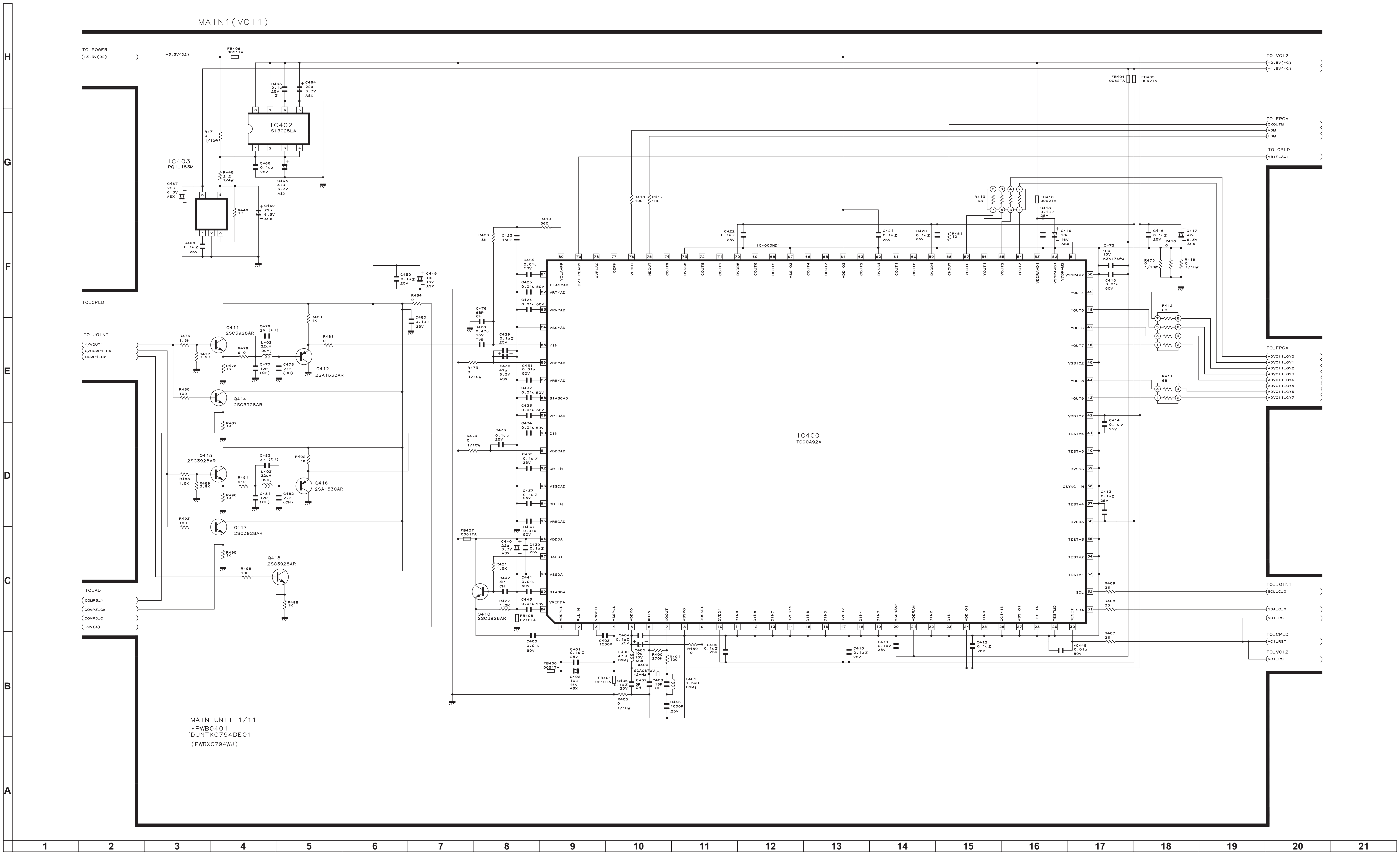
■MAIN Unit-1/11


MAIN1(VCI1)
TO_POWER
(+3.3V(D2)
+3.3V(D2)
FB406 0051TA
TO_VCI2
(+2.5V(YC)
(+1.5V(YC)
FB404 0062TA
FB405 0062TA
TO_FPGA
CKOUTM
VDM
HDM
TO_CPLD
VBIFLAG1
IC402 SI3025LA
C463 0.1u 25V Z
C464 22u 6.3V ASX
C466 0.1uZ 25V
C465 47u 6.3V ASX
R471 0 1/10W
IC403 PQ1L153M
R448 2.2 1/4W
C467 22u 6.3V ASX
R449 1K
C469 22u 6.3V ASX
C468 0.1uZ 25V
R418 100
R417 100
R413 68
FB410 0062TA
C418 0.1uZ 25V
C419 10u 16V ASX
C422 0.1uZ 25V
C421 0.1uZ 25V
C420 0.1uZ 25V
R451 10
IC400GND1
C473 10u 10V KZA176WJ
C416 0.1uZ 25V
C417 47u 6.3V ASX
R410 0
R475 0 1/10W
R416 0 1/10W
C415 0.01u 50V
R412 68
R411 68
TO_FPGA
ADVCI1_GY0
ADVCI1_GY1
ADVCI1_GY2
ADVCI1_GY3
ADVCI1_GY4
ADVCI1_GY5
ADVCI1_GY6
ADVCI1_GY7
C414 0.1uZ 25V
C413 0.1uZ 25V
R409 33
R408 33
R407 33
TO_JOINT
SCL_C_0
SDA_C_0
VCI_RST
TO_CPLD
VCI_RST
TO_VCI2
VCI_RST
C448 0.01u 50V
IC400
TC90A92A
R419 560
R420 18K
C423 150P
C424 0.01u 50V
C425 0.01u 50V
C426 0.01u 50V
C476 68P CH
C428 0.47u 16V TVB
C429 0.1uZ 25V
C430 47u 6.3V ASX
R473 0 1/10W
C431 0.01u 50V
C432 0.01u 50V
C433 0.01u 50V
C434 0.01u 50V
R474 0 1/10W
C436 0.1uZ 25V
C435 0.1uZ 25V
C437 0.1uZ 25V
C438 0.01u 50V
FB407 0051TA
C440 22u 6.3V ASX
C439 0.1uZ 25V
R421 1.5K
C441 0.01u 50V
C442 4P CH
R422 1.2K
C443 0.01u 50V
Q410 2SC3928AR
FB408 0210TA
C400 0.01u 50V
C401 0.1uZ 25V
C402 10u 16V ASX
FB400 0051TA
C403 1500P
C404 0.1uZ 25V
L400 47uH D9MJ
C405 10u 16V ASX
X400
R400 270K
R401 100
R450 10
C409 0.1uZ 25V
SCA067WJ 42MHz
FB401 0210TA
C406 0.1uZ 25V
C407 5P CH
C408 18P CH
L401 1.5uH D9MJ
R405 0 1/10W
C446 1000P 25V
C410 0.1uZ 25V
C411 0.1uZ 25V
C412 0.1uZ 25V
TO_CPLD
TO_JOINT
Y/VOUT1
C/COMP1_Cb
COMP1_Cr
C450 0.1uZ 25V
C449 10u 16V ASX
R484 0
C480 0.1uZ 25V
R480 1K
R481 0
R476 1.5K
R477 3.9K
Q411 2SC3928AR
C479 3P (CH)
L402 22uH D9MJ
R479 910
R478 1K
C477 12P (CH)
C478 27P (CH)
Q412 2SA1530AR
R485 100
Q414 2SC3928AR
R487 1K
Q415 2SC3928AR
C483 3P (CH)
L403 22uH D9MJ
R492 1K
R488 1.5K
R489 3.9K
R491 910
R490 1K
C481 12P (CH)
C482 27P (CH)
Q416 2SA1530AR
R493 100
Q417 2SC3928AR
R495 1K
Q418 2SC3928AR
R496 100
R498 1K
TO_AD
COMP3_Y
COMP3_Cb
COMP3_Cr
+9V(A)
YCLAMPP
BVI READY
UVFLAG
OEPK
VDOUT
HDOUT
COUT9
DVSS5
COUT8
COUT7
DVDD5
COUT6
COUT5
VSSIO3
COUT4
COUT3
VDDIO3
COUT2
DVSS4
COUT1
COUT0
DVDD4
CKOUT
YOUT0
YOUT1
YOUT2
YOUT3
VDDRAM01
VSSRAM01
VDDRAM2
VSSRAM2
YOUT4
YOUT5
YOUT6
YOUT7
VSSIO2
YOUT8
YOUT9
VDDIO2
TESTM6
TESTM5
DVSS3
CSYNC IN
TESTM4
DVDD3
TESTM3
TESTM2
TESTM1
SCL
SDA
BIASYAD
VRTYAD
VRMYAD
VSSYAD
YIN
VDDYAD
VRBYAD
BIASCAD
VRTCAD
CIN
VDDCAD
CR IN
VSSCAD
CB IN
VRBCAD
VDDDA
DAOUT
VSSDA
BIASDA
VREFDA
VDDPLL
PLLIN
VDDFIL
VSSPLL
VDDXO
XOIN
XOOUT
VSSXO
BUSSEL
DVDD1
DIN9
DIN8
DIN7
DVSS12
DIN6
DIN5
DVDD2
DIN4
DIN3
VSSRAM1
VDDRAM1
DIN2
DIN1
VDDIO1
DIN0
GC14IN
VSSIO1
TESTIN
TESTM0
RESET
MAIN UNIT 1/11
*PWB0401
DUNTKC794DE01
(PWBXC794WJ)
H
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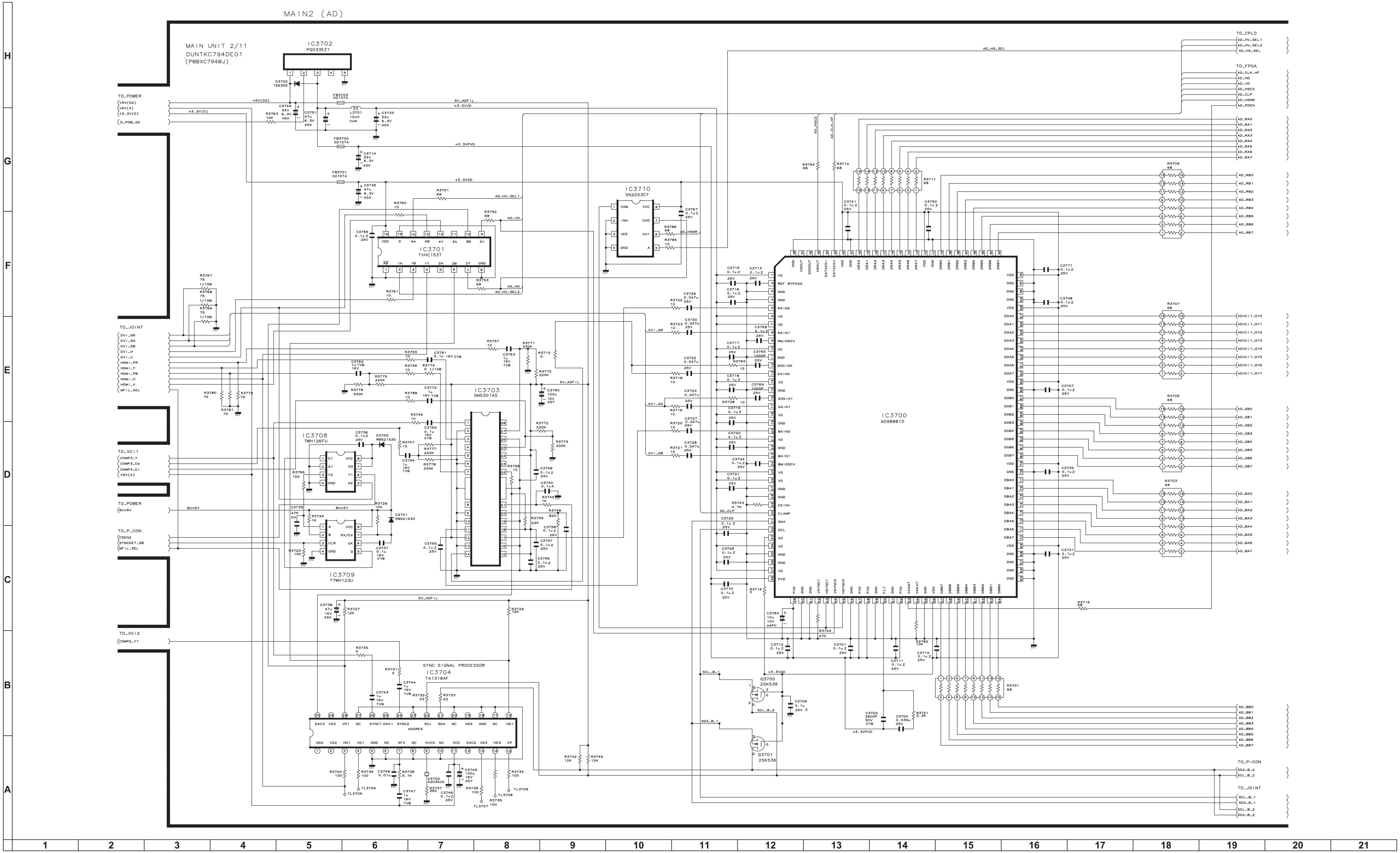
D28

■MAIN Unit-2/11


MAIN2 (AD)
MAIN UNIT 2/11
DUNTKC794DE01
(PWBXC794WJ)
IC3702
PQ033EZ1
IC3701
TVHC153T
IC3710
SN2G53CT
IC3703
SM5301AS
IC3708
7WH126FU
IC3709
T7WH123U
IC3700
AD9888I0
SYNC SIGNAL PROCESSOR
IC3704
TA1318AF
Q3700
2SK536
Q3701
2SK536
TO_POWER
+5V(D2)
+9V(A)
+3.3V(D)
D_POW_AD
TO_JOINT
DVI_SR
DVI_SG
DVI_SB
DVI_H
DVI_V
HDMI_PR
HDMI_Y
HDMI_PB
HDMI_H
HDMI_V
MFIL_SEL
TO_VCI1
COMP3_Y
COMP3_Cb
COMP3_Cr
+9V(A)
TO_POWER
BU+5V
TO_P_CON
CSEN2
SYNCDET_SW
MFIL_SEL
TO_VCI2
COMP2_Y1
5V_ADFIL
+3.3VD
+3.3VPVD
+3.3VAD
AD_HS_SEL
AD_HV_SEL1
AD_HV_SEL2
AD_VD
AD_HD
AD_HSNR
AD_CLP
TO_CPLD
AD_HV_SEL1
AD_HV_SEL2
AD_HS_SEL
TO_FPGA
AD_CLK_HF
AD_HD
AD_VD
AD_HSC2
AD_CLP
AD_HSNR
AD_PDEN
AD_RA0
AD_RA1
AD_RA2
AD_RA3
AD_RA4
AD_RA5
AD_RA6
AD_RA7
AD_RB0
AD_RB1
AD_RB2
AD_RB3
AD_RB4
AD_RB5
AD_RB6
AD_RB7
ADVCI1_GY0
ADVCI1_GY1
ADVCI1_GY2
ADVCI1_GY3
ADVCI1_GY4
ADVCI1_GY5
ADVCI1_GY6
ADVCI1_GY7
AD_GB0
AD_GB1
AD_GB2
AD_GB3
AD_GB4
AD_GB5
AD_GB6
AD_GB7
AD_BA0
AD_BA1
AD_BA2
AD_BA3
AD_BA4
AD_BA5
AD_BA6
AD_BA7
AD_BB0
AD_BB1
AD_BB2
AD_BB3
AD_BB4
AD_BB5
AD_BB6
AD_BB7
TO_P-CON
SDA_B_2
SCL_B_2
TO_JOINT
SCL_B_1
SDA_B_1
SCL_B_2
SDA_B_2
H
G
F
E
D
C
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A
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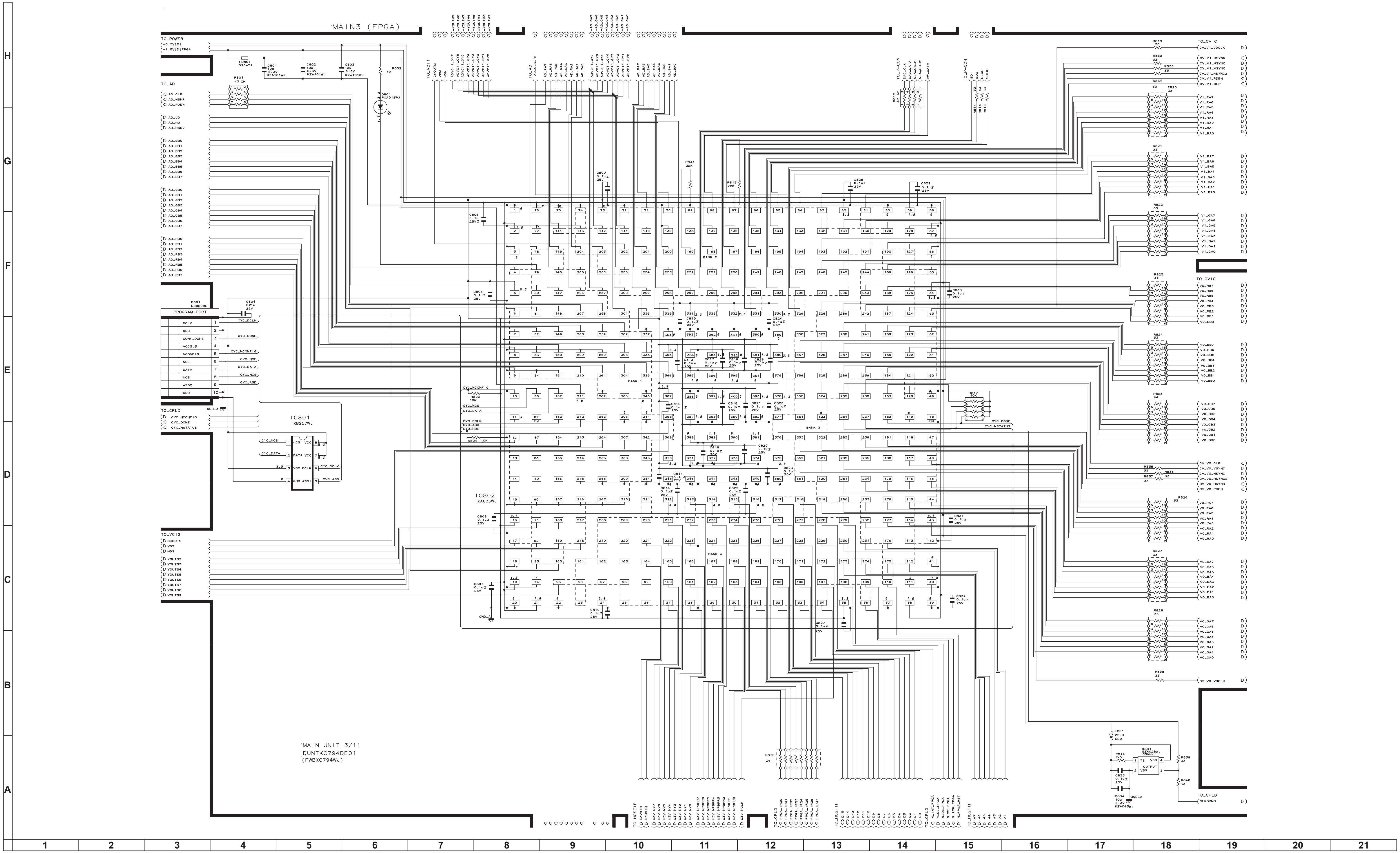
■MAIN Unit-3/11


MAIN3 (FPGA)
TO_POWER
+3.3V(D)
+1.5V(D)FPGA
FB801 0254TA
C801 10u 6.3V KZA101WJ
C802 10u 6.3V KZA101WJ
C803 10u 6.3V KZA101WJ
R802 1K
D801 PXA018WJ
R801 47 CH
TO_AD
AD_CLP
AD_HSNR
AD_PDEN
AD_VD
AD_HD
AD_HSC2
AD_BB0
AD_BB1
AD_BB2
AD_BB3
AD_BB4
AD_BB5
AD_BB6
AD_BB7
AD_GB0
AD_GB1
AD_GB2
AD_GB3
AD_GB4
AD_GB5
AD_GB6
AD_GB7
AD_RB0
AD_RB1
AD_RB2
AD_RB3
AD_RB4
AD_RB5
AD_RB6
AD_RB7
P801 N0060CE
PROGRAM-PORT
DCLK
GND
CONF_DONE
VCC3.3
NCONFIG
NCE
DATA
NCS
ASDO
GND
C804 0.1u 25V
CYC_DCLK
CYC_DONE
CYC_NCONFIG
CYC_NCE
CYC_DATA
CYC_NCS
CYC_ASD
GND_A
TO_CPLD
CYC_NCONFIG
CYC_DONE
CYC_NSTATUS
IC801 IXB257WJ
nCS
DATA
VCC
GND
VCC
DCLK
ASDI
IC802 IXA835WJ
R803 10K
R804 10K
R841 22K
R813 22K
R817 10K
C805 0.1u 25V
C806 0.1uZ 25V
C807 0.1uZ 25V
C808 0.1uZ 25V
C809 0.1uZ 25V
C810 0.1uZ 25V
C828 0.1uZ 25V
C829 0.1uZ 25V
C830 0.1uZ 25V
C831 0.1uZ 25V
C832 0.1uZ 25V
C827 0.1uZ 25V
BANK 1
BANK 2
BANK 3
BANK 4
TO_VC11
CKOUTM
VDM
HDM
ADVC11_GY7 … ADVC11_GY0
TO_AD
AD_CLK_HF
AD_RA7 … AD_RA0
AD_BA7 … AD_BA0
TO_P_CON
DAC_CLK
DAC_DATA
N_ADCS_W
N_ADCS_H
AD_DATA
R812 47 CH
SDI
SDO
N_CS
SCLK
R814 33
R815 33
R816 33
TO_CVIC
R818 33
CV_V1_VDCLK
R832 33
R833 33
CV_V1_HSYNR
CV_V1_HSYNC
CV_V1_VSYNC
CV_V1_HSYNC2
CV_V1_PDEN
CV_V1_CLP
R834 33
R820 33
V1_RA7 … V1_RA0
R821 33
V1_BA7 … V1_BA0
R822 33
V1_GA7 … V1_GA0
TO_CVIC
R823 33
V0_RB7 … V0_RB0
R824 33
V0_BB7 … V0_BB0
R825 33
V0_GB7 … V0_GB0
R835 33
R836 33
R837 33
CV_V0_CLP
CV_V0_HSYNC
CV_V0_VSYNC
CV_V0_HSYNC2
CV_V0_HSYNR
CV_V0_PDEN
R826 33
V0_RA7 … V0_RA0
R827 33
V0_BA7 … V0_BA0
R828 33
V0_GA7 … V0_GA0
R838 33
CV_V0_VDCLK
L801 22uH CEM
X801 SZA028WJ 33MHz
TS
VDD
OUTPUT
VSS
R819 10K
R839 33
R840 33
C833 0.1uZ 25V
C834 10u 6.3V KZA043WJ
GND_A
TO_CPLD
CLK33MB
TO_VC12
CKOUTS
VDS
HDS
YOUTS2
YOUTS3
YOUTS4
YOUTS5
YOUTS6
YOUTS7
YOUTS8
YOUTS9
R810 47
TO_HOSTIF
U3V0IN
U3HD IN
U3V/NV7 … U3V/NV0
U3V/NPBPR7 … U3V/NPBPR0
U3V/NCLK
TO_CPLD
FPGA_IRQ0 … FPGA_IRQ7
TO_HOSTIF
D15 … D0
N_INIT_FPGA
N_CE_FPGA
N_WE_FPGA
N_ACK_FPGA
N_FPGA_RST
TO_HOSTIF
A7 A6 A5 A4 A3 A2 A1
MAIN UNIT 3/11
DUNTKC794DE01
(PWBXC794WJ)
H
G
F
E
D
C
B
A
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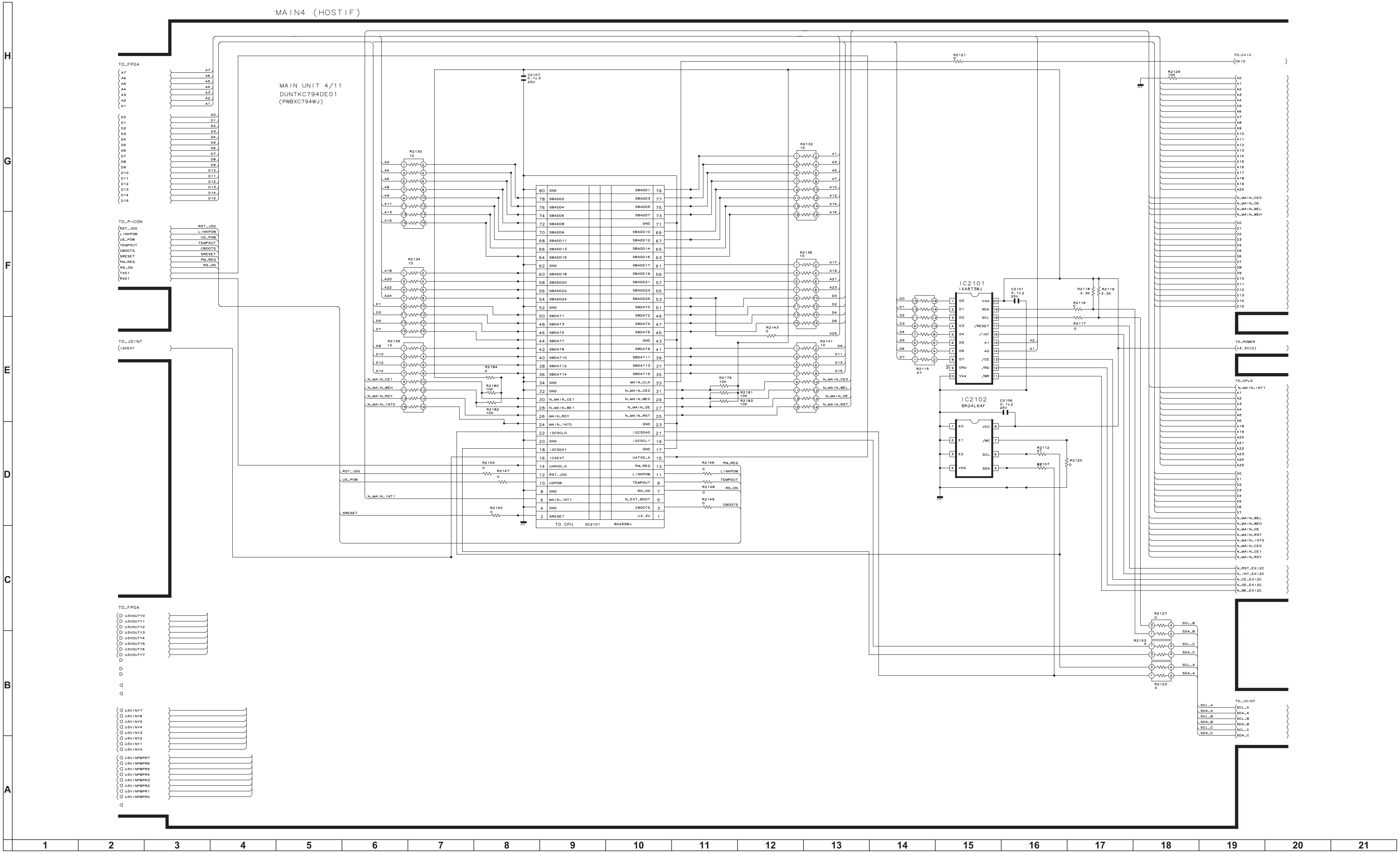
D31

D32

■MAIN Unit-4/11


MAIN4 (HOSTIF)
MAIN UNIT 4/11
DUNTKC794DE01
(PWBXC794WJ)
TO_FPGA
TO_P-CON
TO_JOINT
I2CEXT
TO CPU SC2101 WA255WJ
IC2101
IXA873WJ
IC2102
BR24L64F
C2107 0.1uZ 25V
C2101 0.1uZ 25V
C2106 0.1uZ 25V
R2130 10
R2132 10
R2134 10
R2136 10
R2139 10
R2141 10
R2121 0
R2129 10K
R2118 3.3K
R2119 3.3K
R2115 47
R2112 47
R2120 0
R2127 0
R2153 0
R2123 0
TO_CVIC
CKIO
TO_POWER
+3.3V(D)
TO_CPLD
TO_JOINT
SCL_A
SDA_A
SCL_B
SDA_B
SCL_C
SDA_C
H
G
F
E
D
C
B
A
1
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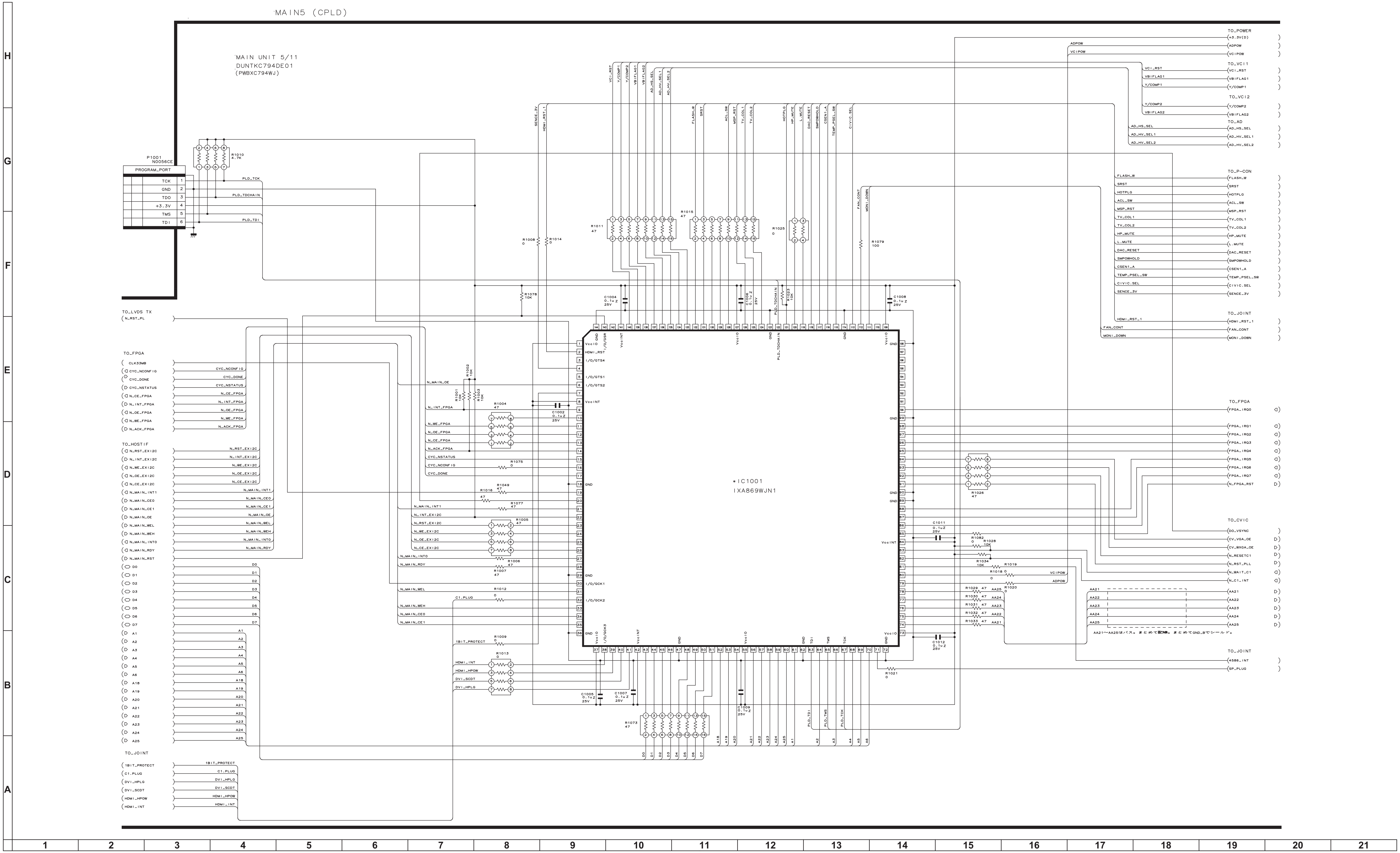
D33

D34

■MAIN Unit-5/11


MAIN5 (CPLD)
MAIN UNIT 5/11
DUNTKC794DE01
(PWBXC794WJ)
P1001
N0056CE
PROGRAM_PORT
TCK 1
GND 2
TDO 3
+3.3V 4
TMS 5
TDI 6
R1010
4.7K
PLD_TCK
PLD_TDCHAIN
PLD_TDI
R1008
0
R1014
0
R1078
10K
R1011
47
R1015
47
R1025
0
R1079
100
C1004
0.1uZ
25V
C1006
0.1uZ
25V
C1008
0.1uZ
25V
R1023
10K
SENCE_3V
HDMI_RST_1
VCI_RST
Y/COMP1
Y/COMP2
VBIFLAG1
VBIFLAG2
AD_HS_SEL
AD_HV_SEL1
AD_HV_SEL2
FLASH_W
SRST
ACL_SW
MSP_RST
TV_COL1
TV_COL2
HOTPLG
HP_MUTE
L.MUTE
DAC_RESET
SMPOWHOLD
CSEN1_A
TEMP_PSEL_SW
CIVIC.SEL
FAN_CONT
MONI_DOWN
PLD_TDCHAIN
TO_LVDS TX
N_RST_PL
TO_FPGA
CLK33MB
CYC_NCONFIG
CYC_DONE
CYC_NSTATUS
N_CE_FPGA
N_INT_FPGA
N_OE_FPGA
N_WE_FPGA
N_ACK_FPGA
TO_HOSTIF
N_RST_EXI2C
N_INT_EXI2C
N_WE_EXI2C
N_OE_EXI2C
N_CE_EXI2C
N_MAIN_INT1
N_MAIN_CE0
N_MAIN_CE1
N_MAIN_OE
N_MAIN_WEL
N_MAIN_WEH
N_MAIN_INT0
N_MAIN_RDY
N_MAIN_RST
D0
D1
D2
D3
D4
D5
D6
D7
A1
A2
A3
A4
A5
A6
A18
A19
A20
A21
A22
A23
A24
A25
TO_JOINT
1BIT_PROTECT
C1.PLUG
DVI_HPLG
DVI_SCDT
HDMI_HPOW
HDMI_INT
R1002
10K
R1001
10K
R1003
10K
R1004
47
C1002
0.1uZ
25V
R1075
0
R1016
47
R1049
47
R1077
47
R1005
47
R1006
47
R1007
47
R1012
0
R1009
0
R1013
0
C1005
0.1uZ
25V
C1007
0.1uZ
25V
C1009
0.1uZ
25V
R1073
47
PLD_TDI
PLD_TMS
PLD_TCK
VccIO
HDMI_RST
I/O/GTS4
I/O/GTS1
I/O/GTS2
VccINT
GND
I/O/GCK1
I/O/GCK2
I/O/GCK3
I/O/GSR
TDI
TMS
TCK
*IC1001
IXA869WJN1
R1026
47
C1011
0.1uZ
25V
R1082
0
R1028
10K
R1034
10K
R1019
R1018 0
0
R1020
0
VCIPOW
ADPOW
R1029 47
R1030 47
R1031 47
R1032 47
R1033 47
AA21
AA22
AA23
AA24
AA25
C1012
0.1uZ
25V
R1021
0
TO_POWER
+3.3V(D)
ADPOW
VCIPOW
TO_VCI1
VCI_RST
VBIFLAG1
Y/COMP1
TO_VCI2
Y/COMP2
VBIFLAG2
TO_AD
AD_HS_SEL
AD_HV_SEL1
AD_HV_SEL2
TO_P-CON
FLASH_W
SRST
HOTPLG
ACL_SW
MSP_RST
TV_COL1
TV_COL2
HP_MUTE
L.MUTE
DAC_RESET
SMPOWHOLD
CSEN1_A
TEMP_PSEL_SW
CIVIC.SEL
SENCE_3V
TO_JOINT
HDMI_RST_1
FAN_CONT
MONI_DOWN
TO_FPGA
FPGA_IRQ0
FPGA_IRQ1
FPGA_IRQ2
FPGA_IRQ3
FPGA_IRQ4
FPGA_IRQ5
FPGA_IRQ6
FPGA_IRQ7
N_FPGA_RST
TO_CVIC
DO_VSYNC
CV_VGA_OE
CV_WXGA_OE
N_RESETC1
N_RST_PLL
N_WAIT_C1
N_C1_INT
AA21
AA22
AA23
AA24
AA25
AA21〜AA25はバス。まとめて配線。まとめてGND_Bでシールド。
TO_JOINT
4586_INT
SP_PLUG
H
G
F
E
D
C
B
A
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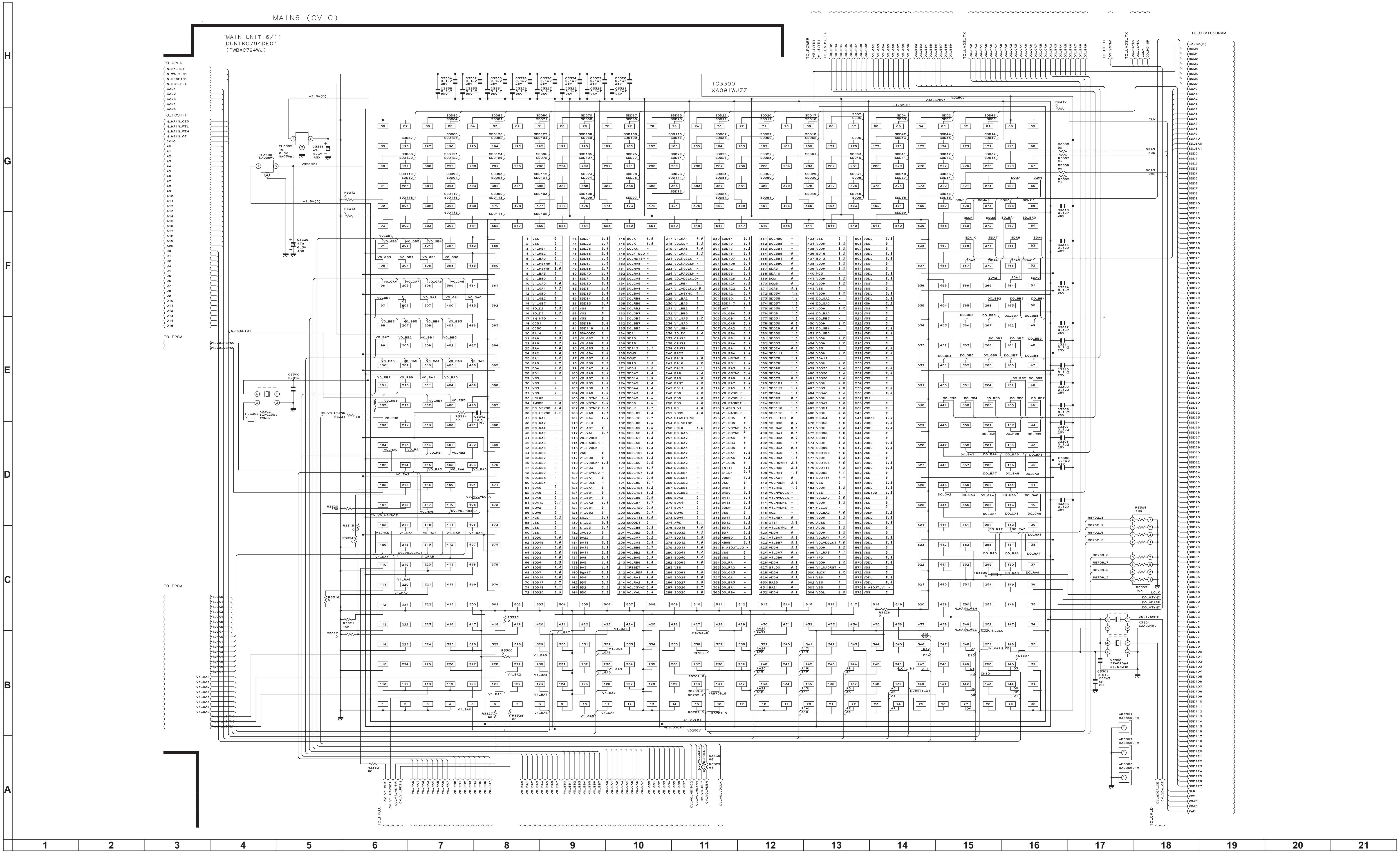
D35

D36

■MAIN Unit-6/11



MAIN6 (CVIC)
MAIN UNIT 6/11
DUNTKC794DE01
(PWBXC794WJ)
IC3300
XA091WJZZ
TO_CPLD
TO_HOSTIF
TO_FPGA
TO_POWER
TO_LVDS_TX
TO_CIVICSDRAM
FL3300
FL3305
X3300
X3301
X3302
H
G
F
E
D
C
B
A
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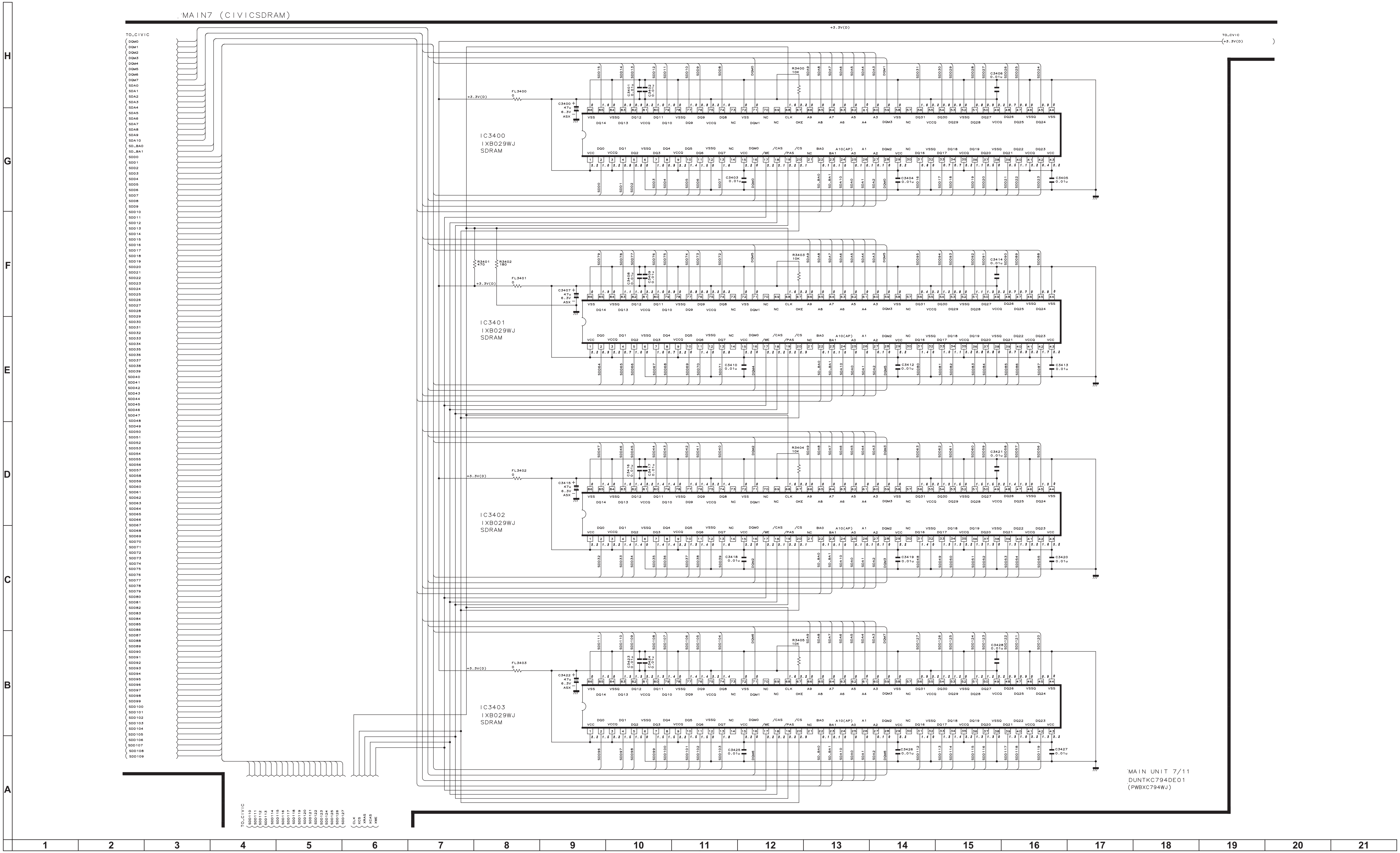
■MAIN Unit-7/11


MAIN7 (CIVICSDRAM)
TO_CIVIC
+3.3V(D)
TO_CIVIC (+3.3V(D)
IC3400 IXB029WJ SDRAM
IC3401 IXB029WJ SDRAM
IC3402 IXB029WJ SDRAM
IC3403 IXB029WJ SDRAM
FL3400 0
FL3401 0
FL3402 0
FL3403 0
C3400 47u 6.3V ASX
C3407 47u 6.3V ASX
C3415 47u 6.3V ASX
C3422 47u 6.3V ASX
R3400 10K
R3403 10K
R3404 10K
R3405 10K
R3401 470
R3402 180
TO_CIVIC SDD110 SDD111 SDD112 SDD113 SDD114 SDD115 SDD116 SDD117 SDD118 SDD119 SDD120 SDD121 SDD122 SDD123 SDD124 SDD125 SDD126 SDD127
CLK XCS XRAS XCAS XWE
MAIN UNIT 7/11
DUNTKC794DE01
(PWBXC794WJ)
H
G
F
E
D
C
B
A
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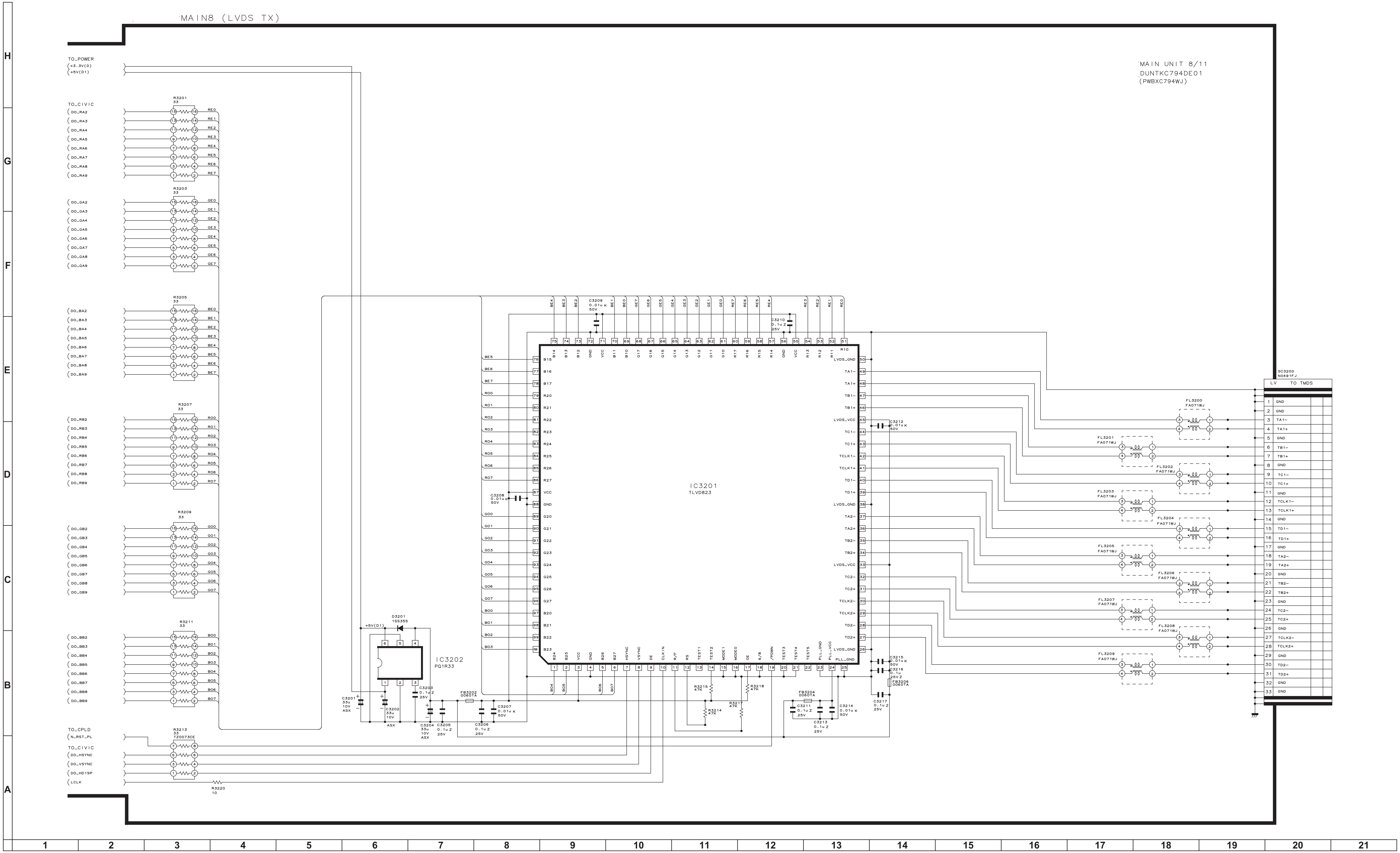
D39

D40

■MAIN Unit-8/11


MAIN8 (LVDS TX)
MAIN UNIT 8/11
DUNTKC794DE01
(PWBXC794WJ)
TO_POWER
(+3.3V(D)
(+5V(D1)
TO_CIVIC
DO_RA2
DO_RA3
DO_RA4
DO_RA5
DO_RA6
DO_RA7
DO_RA8
DO_RA9
R3201
33
RE0
RE1
RE2
RE3
RE4
RE5
RE6
RE7
R3203
33
DO_GA2
DO_GA3
DO_GA4
DO_GA5
DO_GA6
DO_GA7
DO_GA8
DO_GA9
GE0
GE1
GE2
GE3
GE4
GE5
GE6
GE7
R3205
33
DO_BA2
DO_BA3
DO_BA4
DO_BA5
DO_BA6
DO_BA7
DO_BA8
DO_BA9
BE0
BE1
BE2
BE3
BE4
BE5
BE6
BE7
R3207
33
DO_RB2
DO_RB3
DO_RB4
DO_RB5
DO_RB6
DO_RB7
DO_RB8
DO_RB9
RO0
RO1
RO2
RO3
RO4
RO5
RO6
RO7
R3209
33
DO_GB2
DO_GB3
DO_GB4
DO_GB5
DO_GB6
DO_GB7
DO_GB8
DO_GB9
GO0
GO1
GO2
GO3
GO4
GO5
GO6
GO7
R3211
33
DO_BB2
DO_BB3
DO_BB4
DO_BB5
DO_BB6
DO_BB7
DO_BB8
DO_BB9
BO0
BO1
BO2
BO3
BO4
BO5
BO6
BO7
TO_CPLD
N_RST_PL
TO_CIVIC
DO_HSYNC
DO_VSYNC
DO_HDISP
LCLK
R3213
33
TZ0073CE
R3220
10
IC3201
TLVD823
IC3202
PQ1R33
D3201
1SS355
+5V(D1)
C3201
33u
10V
ASX
C3202
33u
10V
ASX
C3203
0.1u Z
25V
C3204
33u
10V
ASX
C3205
0.1u Z
25V
C3206
0.1u Z
25V
C3207
0.01u K
50V
C3208
0.01u K
50V
C3209
0.01u K
50V
C3210
0.1u Z
25V
C3211
0.1u Z
25V
C3212
0.01u K
50V
C3213
0.1u Z
25V
C3214
0.01u K
50V
C3215
0.01u K
50V
C3216
0.1u
25V Z
C3217
0.1u Z
25V
FB3202
0060TA
FB3204
0060TA
FB3206
0060TA
R3214
47K
R3215
47K
R3217
47K
R3218
47K
B14
B13
B12
GND
VCC
B11
B10
G17
G16
G15
G14
G13
G12
G11
G10
R17
R16
R15
R14
R13
R12
R11
R10
B15
B16
B17
R20
R21
R22
R23
R24
R25
R26
R27
G20
G21
G22
G23
G24
G25
G26
G27
B20
B21
B22
B23
B24
B25
B26
B27
HSYNC
VSYNC
DE
CLKIN
R/F
RS
TEST1
TEST2
MODE1
MODE0
OE
6/8
/PDWN
TEST3
TEST4
TEST5
PLL_GND
PLL_VCC
LVDS_GND
TA1-
TA1+
TB1-
TB1+
LVDS_VCC
TC1-
TC1+
TCLK1-
TCLK1+
TD1-
TD1+
TA2-
TA2+
TB2-
TB2+
TC2-
TC2+
TCLK2-
TCLK2+
TD2-
TD2+
FL3200
FA071WJ
FL3201
FA071WJ
FL3202
FA071WJ
FL3203
FA071WJ
FL3204
FA071WJ
FL3205
FA071WJ
FL3206
FA071WJ
FL3207
FA071WJ
FL3208
FA071WJ
FL3209
FA071WJ
SC3200
N0491FJ
LV
TO TMDS
1 GND
2 GND
3 TA1-
4 TA1+
5 GND
6 TB1-
7 TB1+
8 GND
9 TC1-
10 TC1+
11 GND
12 TCLK1-
13 TCLK1+
14 GND
15 TD1-
16 TD1+
17 GND
18 TA2-
19 TA2+
20 GND
21 TB2-
22 TB2+
23 GND
24 TC2-
25 TC2+
26 GND
27 TCLK2-
28 TCLK2+
29 GND
30 TD2-
31 TD2+
32 GND
33 GND
H
G
F
E
D
C
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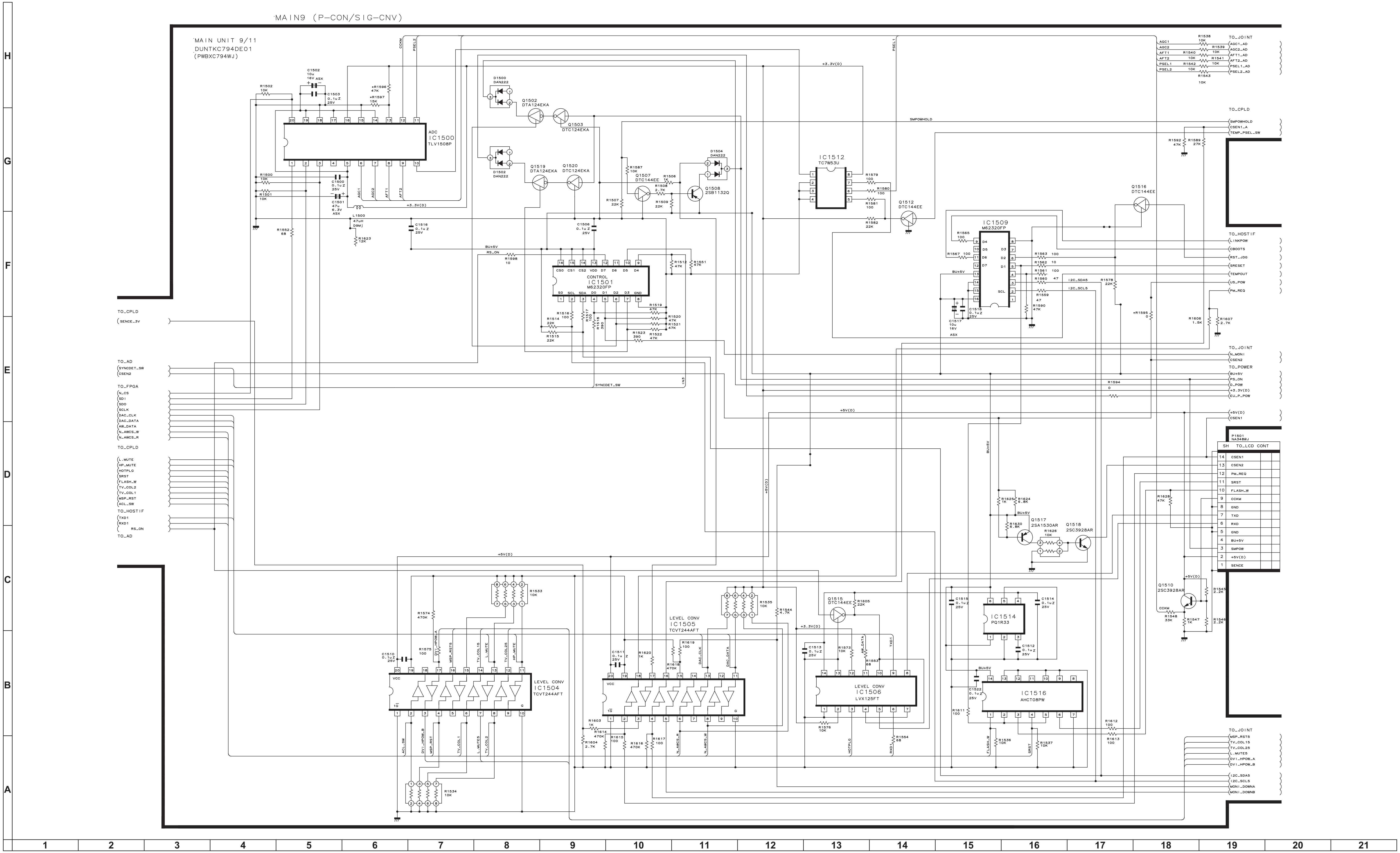
D41

D42

■MAIN Unit-9/11



MAIN9 (P-CON/SIG-CNV)
MAIN UNIT 9/11
DUNTKC794DE01
(PWBXC794WJ)
ADC
IC1500
TLV1508P
IC1501
CONTROL
M62320FP
IC1512
TC7W53U
IC1509
M62320FP
Q1502
DTA124EKA
Q1503
DTC124EKA
Q1519
DTA124EKA
Q1520
DTC124EKA
D1500
DAN222
D1502
DAN222
D1504
DAN222
Q1507
DTC144EE
Q1508
2SB1132Q
Q1512
DTC144EE
Q1516
DTC144EE
Q1517
2SA1530AR
Q1518
2SC3928AR
Q1510
2SC3928AR
Q1515
DTC144EE
LEVEL CONV
IC1504
TCVT244AFT
LEVEL CONV
IC1505
TCVT244AFT
LEVEL CONV
IC1506
LVX125FT
IC1514
PQ1R33
IC1516
AHCT08PW
P1501
NA348WJ
TO_LCD CONT
+3.3V(D)
+5V(D)
BU+5V
SMPOWHOLD
TO_JOINT
TO_CPLD
TO_HOSTIF
TO_POWER
TO_AD
TO_FPGA
SENCE_3V
SYNCDET_SW
CSEN2
N_CS
SDI
SDO
SCLK
DAC_CLK
DAC_DATA
AB_DATA
N_AMCS_W
N_AMCS_R
L_MUTE
HP_MUTE
HOTPLG
SRST
FLASH_W
TV_COL2
TV_COL1
MSP_RST
ACL_SW
TXD1
RXD1
RS_ON
AGC1_AD
AGC2_AD
AFT1_AD
AFT2_AD
PSEL1_AD
PSEL2_AD
SMPOWHOLD
CSEN1_A
TEMP_PSEL_SW
LINKPOW
CBOOTS
RST_JDG
SRESET
TEMPOUT
US_POW
PM_REQ
N_MONI
CSEN2
BU+5V
PS_ON
D_POW
+3.3V(D)
EU_P_POW
+5V(D)
CSEN1
MSP_RST5
TV_COL15
TV_COL25
L_MUTE5
DVI_HPOW_A
DVI_HPOW_B
I2C_SDA5
I2C_SCL5
MONI_DOWNA
MONI_DOWNB
14 CSEN1
13 CSEN2
12 PM_REQ
11 SRST
10 FLASH_W
9 CCKM
8 GND
7 TXD
6 RXD
5 GND
4 BU+5V
3 SMPOW
2 +5V(D)
1 SENCE
H
G
F
E
D
C
B
A
1
2
3
4
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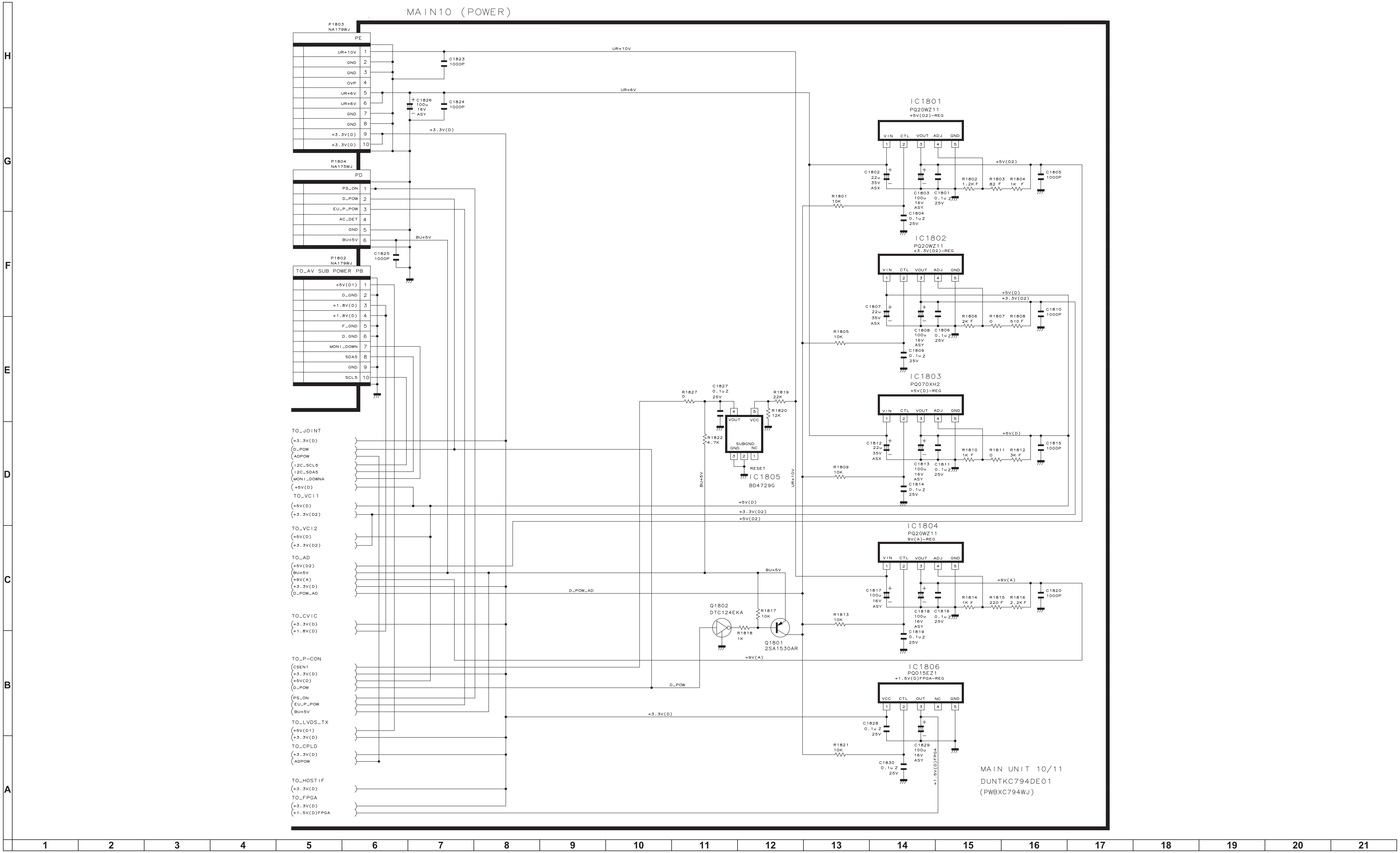
■MAIN Unit-10/11


MAIN10 (POWER)
P1803
NA179WJ
PE
UR+10V
GND
OVP
UR+6V
+3.3V(D)
P1804
NA175WJ
PD
PS_ON
D_POW
EU_P_POW
AC_DET
BU+5V
P1802
NA179WJ
TO_AV SUB POWER PB
+5V(D1)
D_GND
+1.8V(D)
F_GND
MONI_DOWN
SDA5
SCL5
C1823 1000P
C1824 1000P
C1826 100u 16V ASY
C1825 1000P
IC1801
PQ20WZ11
+5V(D2)-REG
IC1802
PQ20WZ11
+3.3V(D2)-REG
IC1803
PQ070XH2
+5V(D)-REG
IC1804
PQ20WZ11
9V(A)-REG
IC1806
PQ015EZ1
+1.5V(D)FPGA-REG
IC1805
BD4729G
RESET
Q1802
DTC124EKA
Q1801
2SA1530AR
VIN CTL VOUT ADJ GND
VCC CTL OUT NC GND
TO_JOINT
TO_VCI1
TO_VCI2
TO_AD
TO_CVIC
TO_P-CON
TO_LVDS_TX
TO_CPLD
TO_HOSTIF
TO_FPGA
D_POW_AD
+9V(A)
+5V(D2)
+3.3V(D2)
+1.5V(D)FPGA
MAIN UNIT 10/11
DUNTKC794DE01
(PWBXC794WJ)
H
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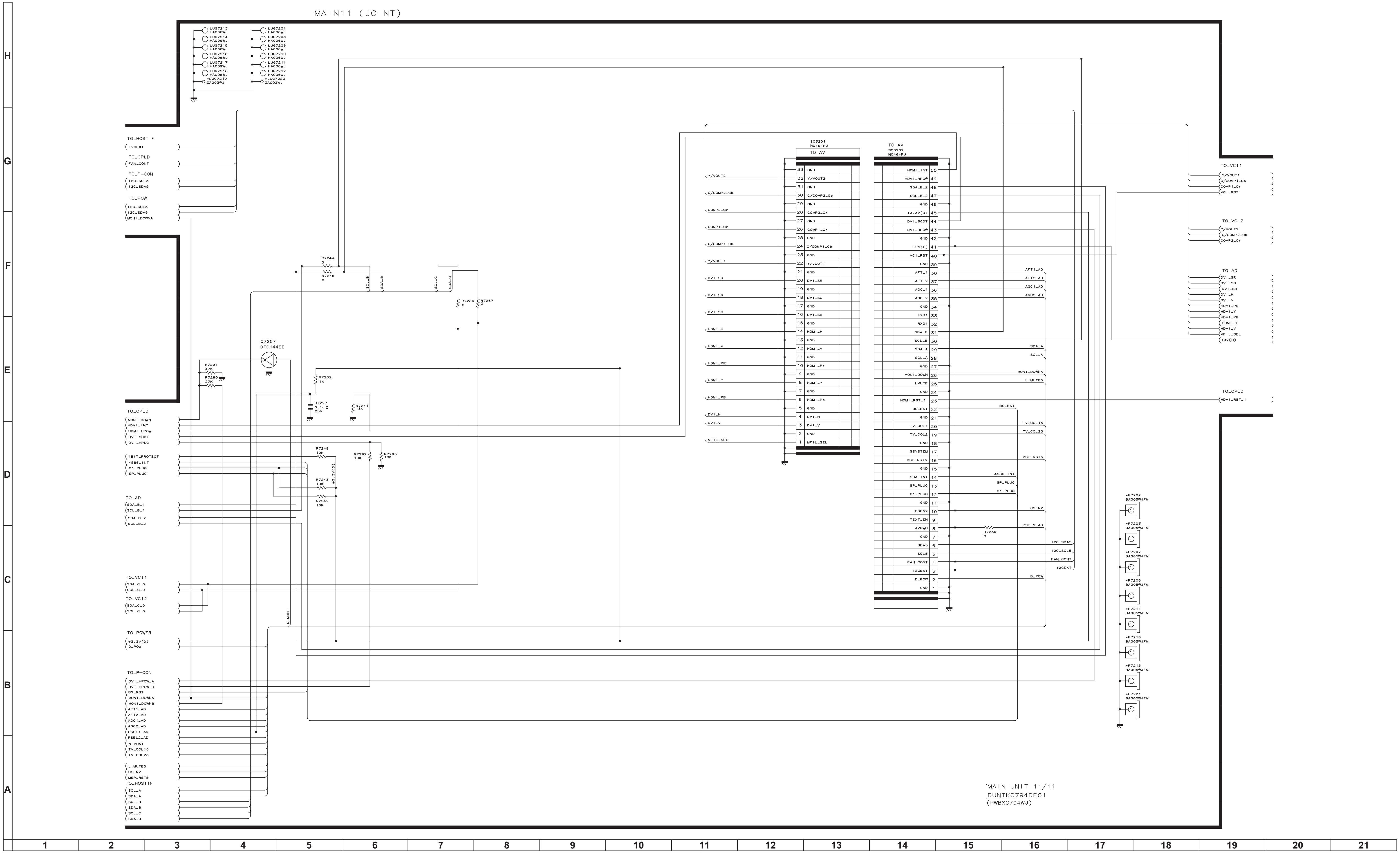
D46

■MAIN Unit-11/11


MAIN11 (JOINT)
LUG7213 HA006WJ
LUG7214 HA006WJ
LUG7215 HA006WJ
LUG7216 HA006WJ
LUG7217 HA006WJ
LUG7218 HA006WJ
*LUG7219 ZA003WJ
LUG7201 HA006WJ
LUG7208 HA006WJ
LUG7209 HA006WJ
LUG7210 HA006WJ
LUG7211 HA006WJ
LUG7212 HA006WJ
*LUG7220 ZA003WJ
TO_HOSTIF
I2CEXT
TO_CPLD
FAN_CONT
TO_P-CON
I2C_SCL5
I2C_SDA5
TO_POW
I2C_SCL5
I2C_SDA5
MONI_DOWNA
R7244 0
R7246 0
SCL_B
SDA_B
SCL_C
SDA_C
R7266 0
R7267 0
Q7207 DTC144EE
R7291 47K
R7290 27K
R7262 1K
C7227 0.1u Z 25V
R7241 18K
TO_CPLD
MONI_DOWN
HDMI_INT
HDMI_HPOW
DVI_SCDT
DVI_HPLG
1BIT_PROTECT
4586_INT
C1_PLUG
SP_PLUG
R7249 10K
R7243 10K
R7242 10K
+3.3V(D)
R7292 10K
R7293 18K
TO_AD
SDA_B_1
SCL_B_1
SDA_B_2
SCL_B_2
TO_VCI1
SDA_C_0
SCL_C_0
TO_VCI2
SDA_C_0
SCL_C_0
TO_POWER
+3.3V(D)
D_POW
N_MONI
TO_P-CON
DVI_HPOW_A
DVI_HPOW_B
BS_RST
MONI_DOWNA
MONI_DOWNB
AFT1_AD
AFT2_AD
AGC1_AD
AGC2_AD
PSEL1_AD
PSEL2_AD
N_MONI
TV_COL15
TV_COL25
L_MUTE5
CSEN2
MSP_RST5
TO_HOSTIF
SCL_A
SDA_A
SCL_B
SDA_B
SCL_C
SDA_C
SC3201 N0491FJ
TO AV
33 GND
32 Y/VOUT2
31 GND
30 C/COMP2_Cb
29 GND
28 COMP2_Cr
27 GND
26 COMP1_Cr
25 GND
24 C/COMP1_Cb
23 GND
22 Y/VOUT1
21 GND
20 DVI_SR
19 GND
18 DVI_SG
17 GND
16 DVI_SB
15 GND
14 HDMI_H
13 GND
12 HDMI_V
11 GND
10 HDMI_Pr
9 GND
8 HDMI_Y
7 GND
6 HDMI_Pb
5 GND
4 DVI_H
3 DVI_V
2 GND
1 MFIL_SEL
Y/VOUT2
C/COMP2_Cb
COMP2_Cr
COMP1_Cr
C/COMP1_Cb
Y/VOUT1
DVI_SR
DVI_SG
DVI_SB
HDMI_H
HDMI_V
HDMI_PR
HDMI_Y
HDMI_PB
DVI_H
DVI_V
MFIL_SEL
TO AV
SC3202 N0464FJ
HDMI_INT 50
HDMI_HPOW 49
SDA_B_2 48
SCL_B_2 47
GND 46
+3.3V(D) 45
DVI_SCDT 44
DVI_HPOW 43
GND 42
+9V(B) 41
VCI_RST 40
GND 39
AFT_1 38
AFT_2 37
AGC_1 36
AGC_2 35
GND 34
TXD1 33
RXD1 32
SDA_B 31
SCL_B 30
SDA_A 29
SCL_A 28
GND 27
MONI_DOWN 26
LMUTE 25
GND 24
HDMI_RST_1 23
BS_RST 22
GND 21
TV_COL1 20
TV_COL2 19
GND 18
SSYSTEM 17
MSP_RST5 16
GND 15
SDA_INT 14
SP_PLUG 13
C1_PLUG 12
GND 11
CSEN2 10
TEXT_EN 9
AVPWB 8
GND 7
SDA5 6
SCL5 5
FAN_CONT 4
I2CEXT 3
D_POW 2
GND 1
AFT1_AD
AFT2_AD
AGC1_AD
AGC2_AD
SDA_A
SCL_A
MONI_DOWNA
L_MUTE5
BS_RST
TV_COL15
TV_COL25
MSP_RST5
4586_INT
SP_PLUG
C1_PLUG
CSEN2
PSEL2_AD
R7256 0
I2C_SDA5
I2C_SCL5
FAN_CONT
I2CEXT
D_POW
TO_VCI1
Y/VOUT1
C/COMP1_Cb
COMP1_Cr
VCI_RST
TO_VCI2
Y/VOUT2
C/COMP2_Cb
COMP2_Cr
TO_AD
DVI_SR
DVI_SG
DVI_SB
DVI_H
DVI_V
HDMI_PR
HDMI_Y
HDMI_PB
HDMI_H
HDMI_V
MFIL_SEL
+9V(B)
TO_CPLD
HDMI_RST_1
*P7202 BA005WJFM
*P7203 BA005WJFM
*P7207 BA005WJFM
*P7208 BA005WJFM
*P7211 BA005WJFM
*P7210 BA005WJFM
*P7215 BA005WJFM
*P7221 BA005WJFM
MAIN UNIT 11/11
DUNTKC794DE01
(PWBXC794WJ)
H
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C
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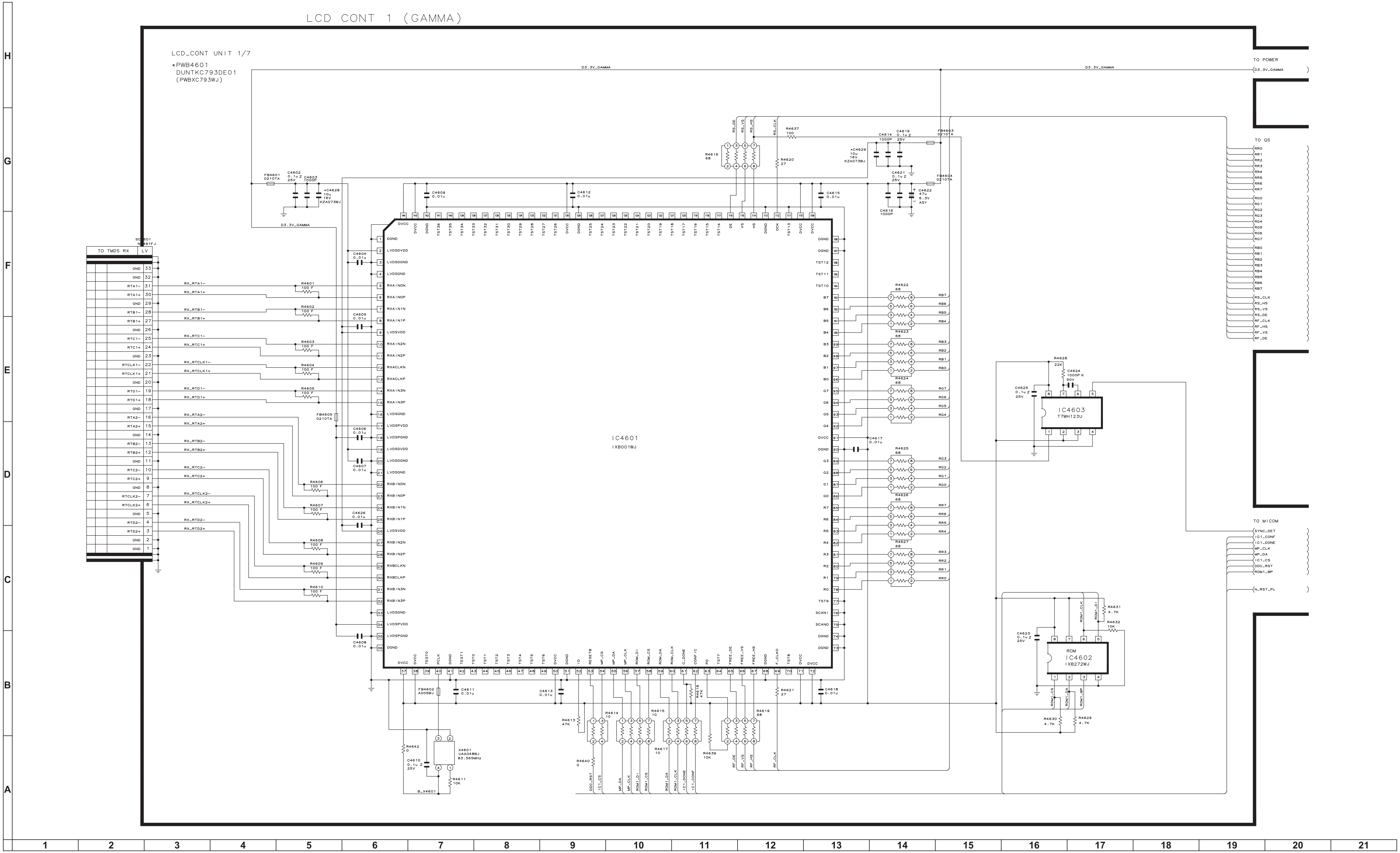
D47

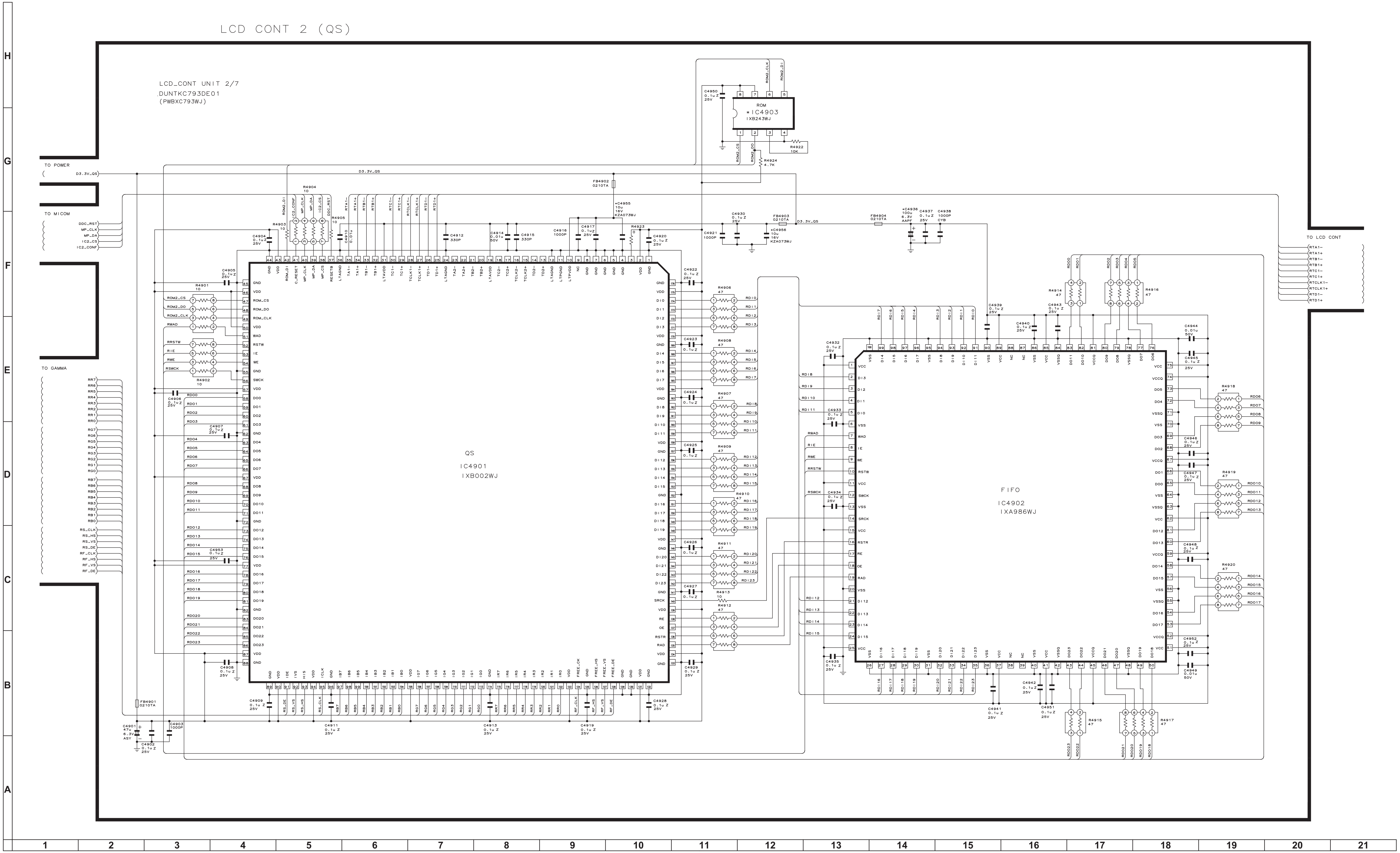
D48

■LCD CONTROL Unit-1/7



LCD CONT 1 (GAMMA)
LCD_CONT UNIT 1/7
*PWB4601
DUNTKC793DE01
(PWBXC793WJ)
D3.3V_GAMMA
TO POWER
TO QS
TO MICOM
TO TMDS RX
SC4601
IC4601
IXB001WJ
IC4602
IXB272WJ
ROM
IC4603
T7WH123U
X4601
UAA048WJ
83.565MHz
RR0 RR1 RR2 RR3 RR4 RR5 RR6 RR7
RG0 RG1 RG2 RG3 RG4 RG5 RG6 RG7
RB0 RB1 RB2 RB3 RB4 RB5 RB6 RB7
RS_CLK RS_HS RS_VS RS_DE
RF_CLK RF_HS RF_VS RF_DE
SYNC_DET IC1_CONF IC1_DONE MP_CLK MP_DA IC1_CS DDC_RST ROM1_WP
N_RST_PL
RX_RTA1- RX_RTA1+ RX_RTB1- RX_RTB1+ RX_RTC1- RX_RTC1+ RX_RTCLK1- RX_RTCLK1+ RX_RTD1- RX_RTD1+
RX_RTA2- RX_RTA2+ RX_RTB2- RX_RTB2+ RX_RTC2- RX_RTC2+ RX_RTCLK2- RX_RTCLK2+ RX_RTD2- RX_RTD2+
H G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

■LCD CONTROL Unit-2/7 (LC-26GA5U)



LCD CONT 2 (QS)
LCD_CONT UNIT 2/7
DUNTKC793DE01
(PWBXC793WJ)
TO POWER
D3.3V_QS
TO MICOM
DDC_RST
MP_CLK
MP_DA
IC2_CS
IC2_CONF
TO GAMMA
TO LCD CONT
ROM
*IC4903
IXB243WJ
QS
IC4901
IXB002WJ
FIFO
IC4902
IXA986WJ
FB4901
FB4902
FB4903
FB4904
0210TA
H
G
F
E
D
C
B
A
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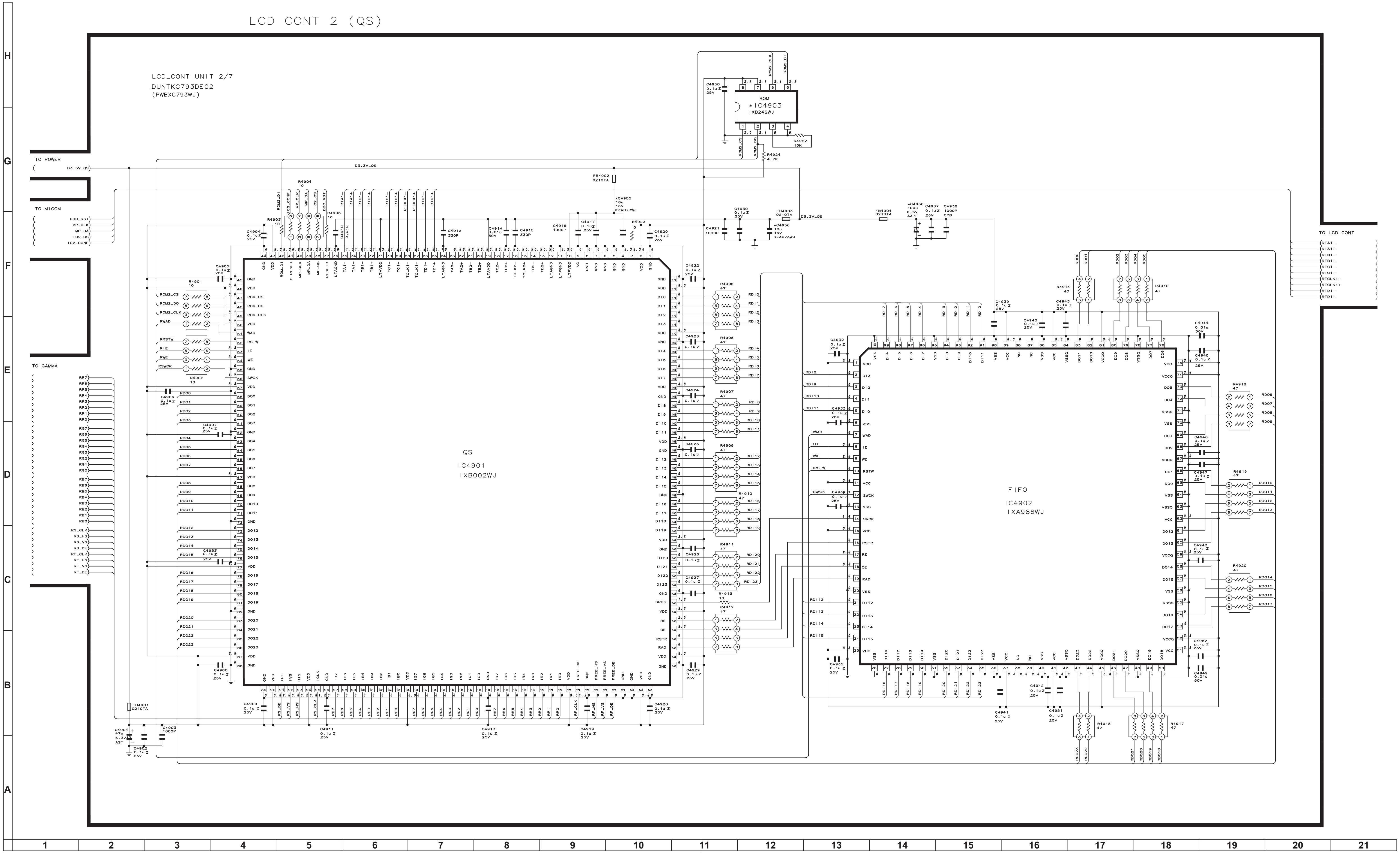
■LCD CONTROL Unit-2/7 (LC-32GA5U)


LCD CONT 2 (QS)
LCD_CONT UNIT 2/7
DUNTKC793DE02
(PWBXC793WJ)
TO POWER
D3.3V_QS
TO MICOM
DDC_RST
MP_CLK
MP_DA
IC2_CS
IC2_CONF
TO GAMMA
TO LCD CONT
RTA1-
RTA1+
RTB1-
RTB1+
RTC1-
RTC1+
RTCLK1-
RTCLK1+
RTD1-
RTD1+
ROM
IC4903
IXB242WJ
QS
IC4901
IXB002WJ
FIFO
IC4902
IXA986WJ
H
G
F
E
D
C
B
A
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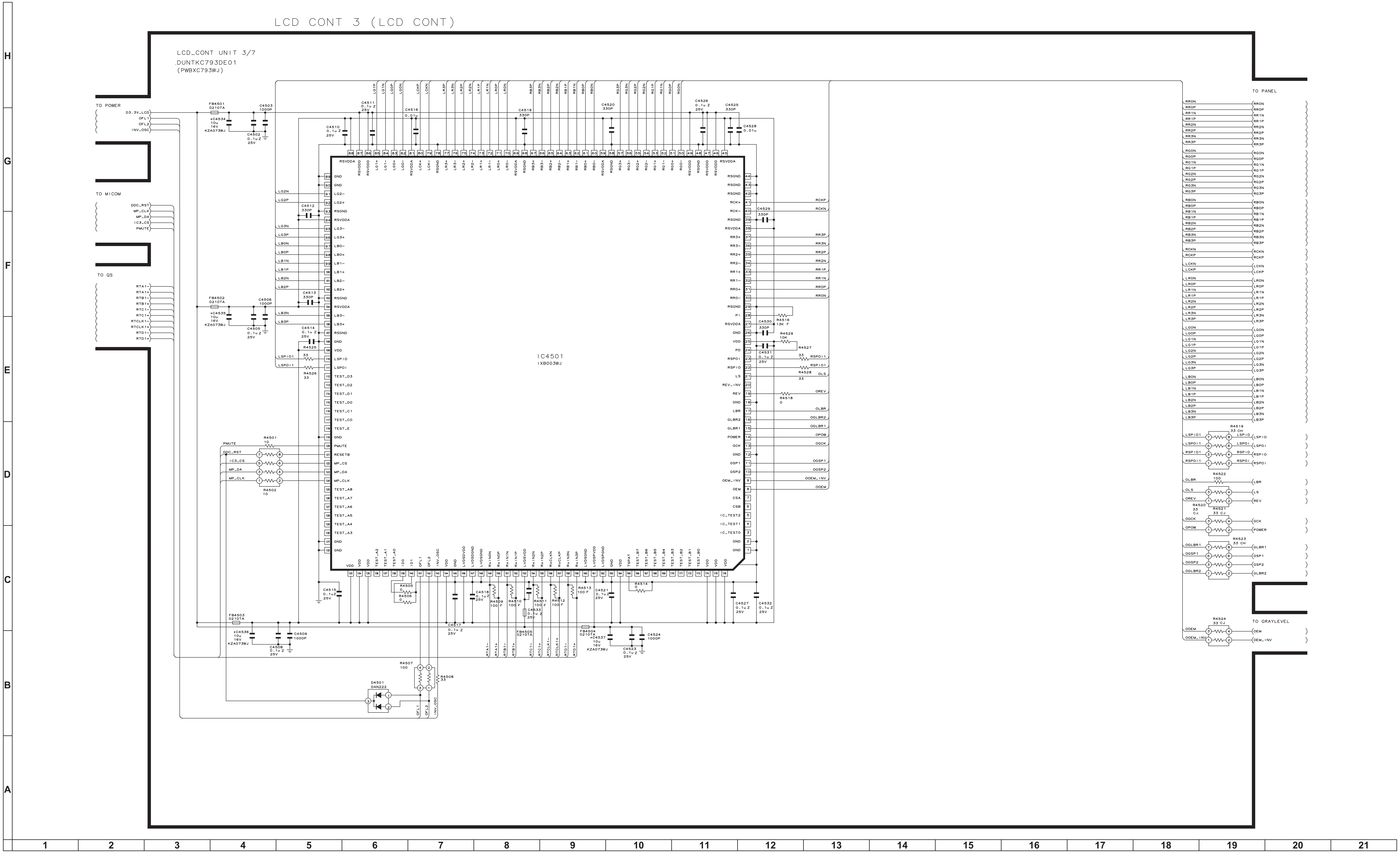
D53

D54

■LCD CONTROL Unit-3/7



LCD CONT 3 (LCD CONT)
LCD_CONT UNIT 3/7
DUNTKC793DE01
(PWBXC793WJ)
TO POWER
D3.3V_LCD
OFL1
OFL2
INV_OSC
TO MICOM
DDC_RST
MP_CLK
MP_DA
IC3_CS
PMUTE
TO QS
RTA1-
RTA1+
RTB1-
RTB1+
RTC1-
RTC1+
RTCLK1-
RTCLK1+
RTD1-
RTD1+
IC4501
IXB003WJ
D4501
DAN222
TO PANEL
TO GRAYLEVEL
OEM
OEM_INV
H
G
F
E
D
C
B
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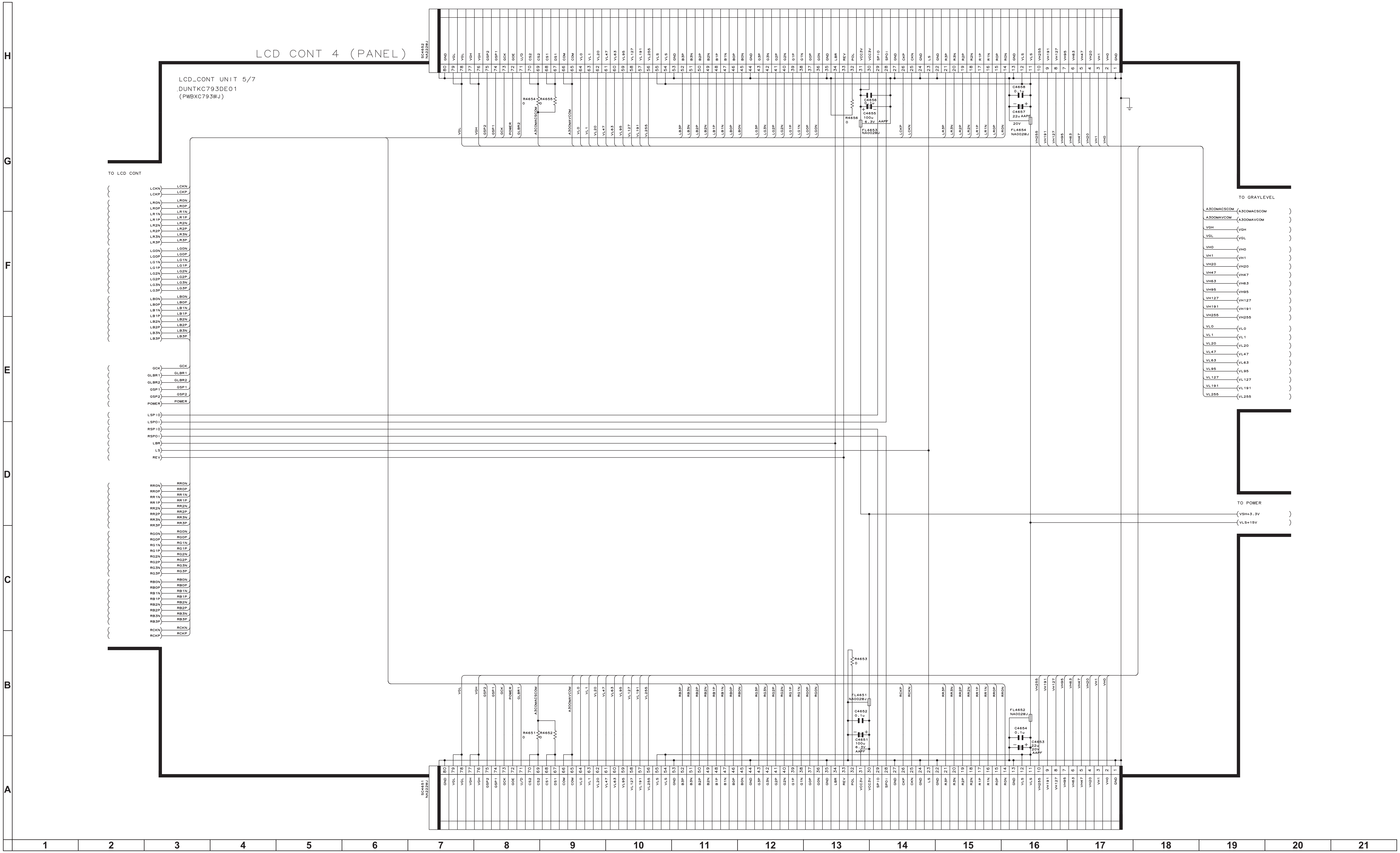
D56

■LCD CONTROL Unit-4/7


LCD CONT 4 (PANEL)
LCD_CONT UNIT 5/7
DUNTKC793DE01
(PWBXC793WJ)
SC4652 NA222WJ
SC4651 NA222WJ
TO LCD CONT
TO GRAYLEVEL
TO POWER
VSH+3.3V
VLS+15V
R4654 0
R4655
R4656 0
C4656 0.1u
C4655 100u 6.3V AAPF
FL4653 NA002WJ
C4658 0.1u
C4657 22u AAPF 20V
FL4654 NA002WJ
R4653 0
FL4651 NA002WJ
C4652 0.1u
C4651 100u 6.3V AAPF
FL4652 NA002WJ
C4654 0.1u
C4653 22u 20V AAPF
R4651 0
R4652
LSPIO
LSPOI
RSPIO
RSPOI
LBR
LS
REV
GCK
GLBR1
GLBR2
GSP1
GSP2
POWER
A3COMACSCOM
A3OOMAVCOM
VGH
VGL
VH0
VH1
VH20
VH47
VH63
VH95
VH127
VH191
VH255
VL0
VL1
VL20
VL47
VL63
VL95
VL127
VL191
VL255
H
G
F
E
D
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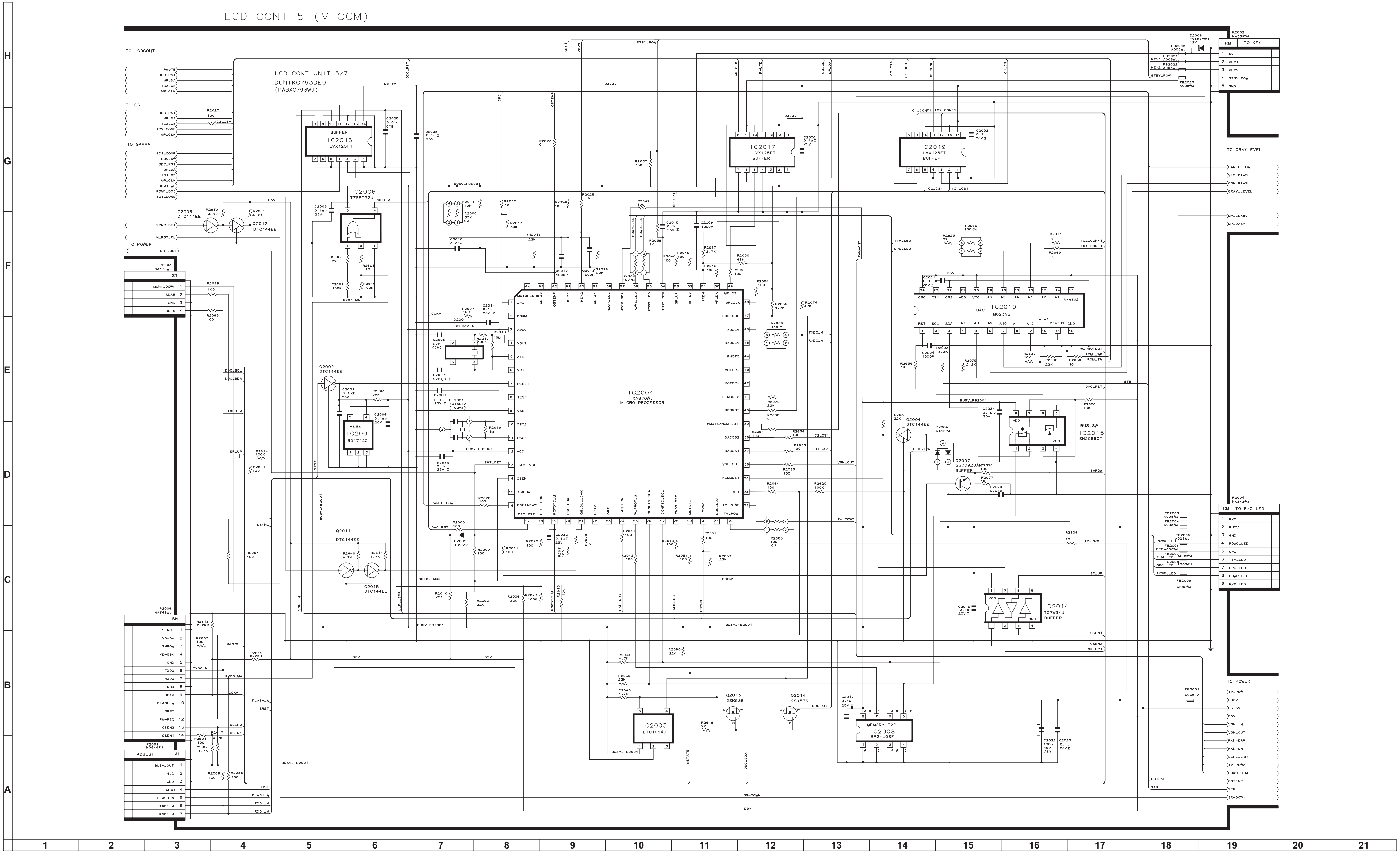
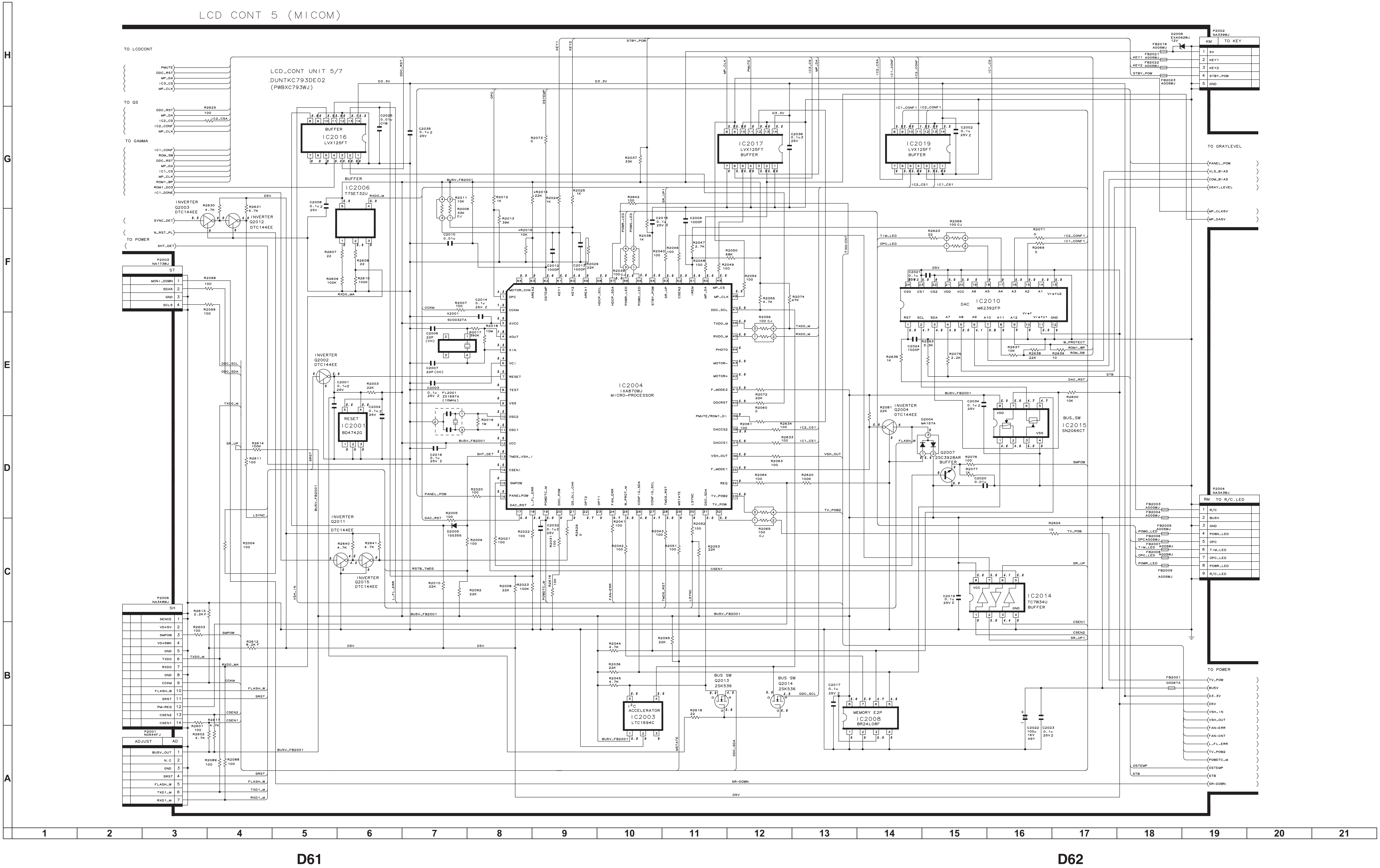
D57 **D58**

■LCD CONTROL Unit-5/7 (LC-26GA5U)


LCD CONT 5 (MICOM)
LCD_CONT UNIT 5/7
DUNTKC793DE01
(PWBXC793WJ)
TO LCDCONT
TO QS
TO GAMMA
TO POWER
TO KEY
TO GRAYLEVEL
TO R/C.LED
IC2004
IXA870WJ
MICRO-PROCESSOR
IC2016 LVX125FT BUFFER
IC2017 LVX125FT BUFFER
IC2019 LVX125FT BUFFER
IC2006 T7SET32U
IC2001 RESET BD4742G
IC2010 DAC M62392FP
IC2015 BUS_SW SN2G66CT
IC2014 TC7W34U BUFFER
IC2003 LTC1694C
IC2008 MEMORY E2P BR24L08F
Q2003 DTC144EE
Q2012 DTC144EE
Q2002 DTC144EE
Q2011 DTC144EE
Q2015 DTC144EE
Q2004 DTC144EE
Q2007 2SC3928AR BUFFER
Q2013 2SK536
Q2014 2SK536
D2004 MA157A
D2005 1SS355
D2006 EXA092WJ 12V
X2001 SC0032TA
FL2001 Z0169TA (10MHz)
P2002 NA339WJ
P2003 NA173WJ
P2004 NA343WJ
P2006 NA348WJ
P2001 N0544FJ
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
H G F E D C B A

■LCD CONTROL Unit-5/7 (LC-32GA5U)



LCD CONT 5 (MICOM)
LCD_CONT UNIT 5/7
DUNTKC793DE02
(PWBXC793WJ)
TO LCDCONT
TO QS
TO GAMMA
TO POWER
TO KEY
TO GRAYLEVEL
TO R/C.LED
P2002 NA339WJ
P2003 NA173WJ
P2004 NA343WJ
P2006 NA348WJ
P2001 N0544FJ
ADJUST
IC2004 IXA870WJ MICRO-PROCESSOR
IC2016 LVX125FT BUFFER
IC2017 LVX125FT BUFFER
IC2019 LVX125FT BUFFER
IC2006 T7SET32U BUFFER
IC2001 BD4742G RESET
IC2010 M62392FP DAC
IC2015 SN2G66CT BUS_SW
IC2014 TC7W34U BUFFER
IC2003 LTC1694C I²C ACCELERATOR
IC2008 BR24L08F MEMORY E2P
Q2003 DTC144EE INVERTER
Q2012 DTC144EE INVERTER
Q2002 DTC144EE INVERTER
Q2011 DTC144EE INVERTER
Q2015 DTC144EE INVERTER
Q2004 DTC144EE INVERTER
Q2007 2SC3928AR BUFFER
Q2013 2SK536 BUS SW
Q2014 2SK536 BUS SW
D2004 MA157A
D2005 1SS355
D2006 EXA092WJ 12V
X2001 SC0032TA
FL2001 Z0169TA (10MHz)
FB2001 0006TA
5V
KEY1
KEY2
STBY_POW
GND
R/C
BU5V
POWG_LED
OPC
TIM_LED
OPC_LED
POWR_LED
R/C_LED
PANEL_POW
VLS_BIAS
COM_BIAS
GRAY_LEVEL
MP_CLK5V
MP_DA5V
TV_POW
D3.3V
D5V
VSH_IN
VSH_OUT
FAN-ERR
FAN-CNT
L_FL_ERR
TV_POW2
POWDTC_M
OSTEMP
STB
SR-DOWN
MONI_DOWN
SDA5
SCL5
SENCE
VD+5V
SMPOW
VD+5BK
TXD0
RXD0
CCKM
FLASH_W
SRST
PM-REQ
CSEN2
CSEN1
BU5V_OUT
N.C
TXD1_M
RXD1_M
PMUTE
DDC_RST
MP_DA
IC3_CS
MP_CLK
IC2_CS
IC2_CONF
IC1_CONF
ROM_SW
IC1_CS
ROM1_WP
ROM1_DO3
IC1_DONE
SYNC_DET
N_RST_PL
SHT_DET
H
G
F
E
D
C
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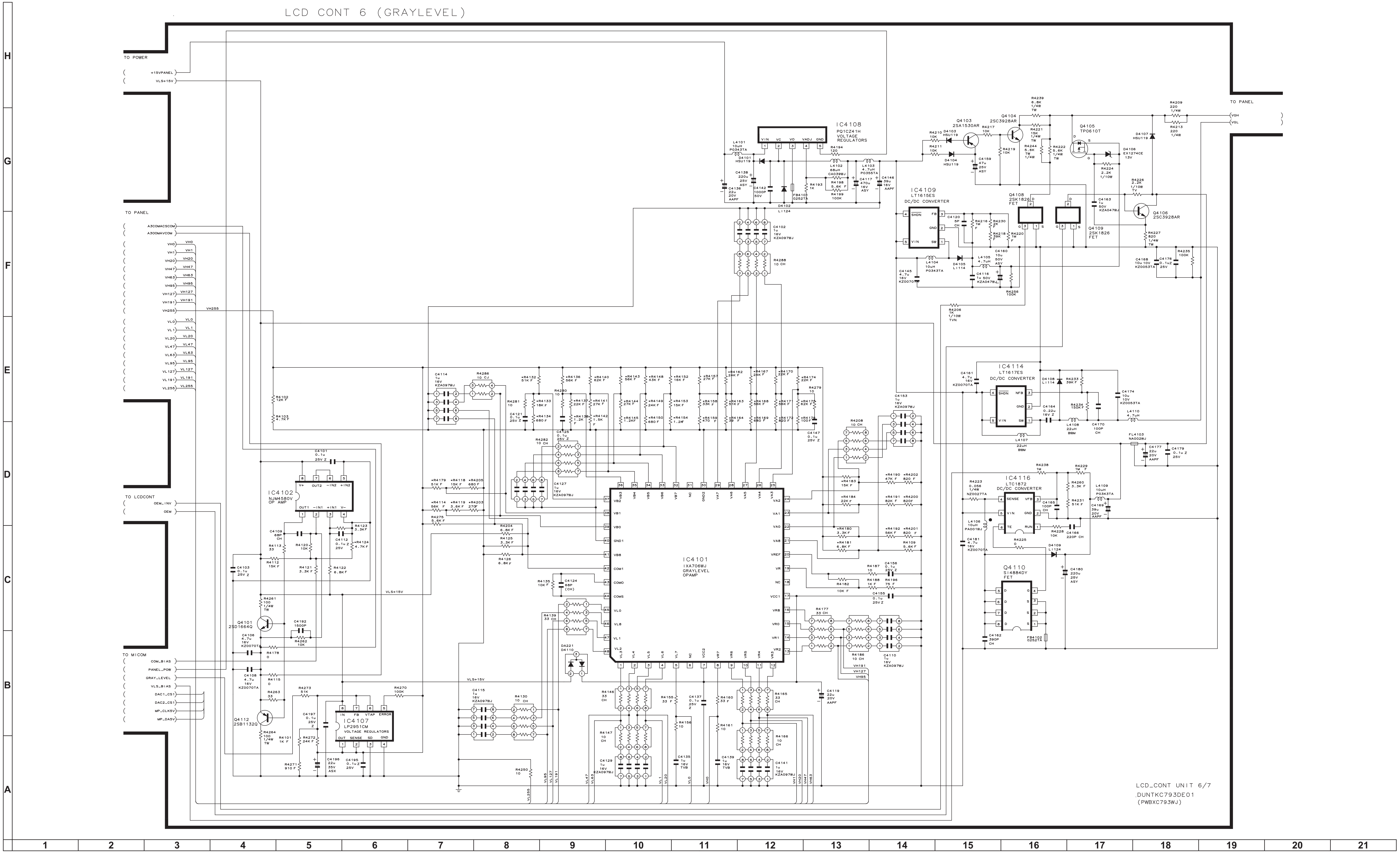
D62

■LCD CONTROL Unit-6/7 (LC-26GA5U)


LCD CONT 6 (GRAYLEVEL)
TO POWER
+15VPANEL
VLS+15V
TO PANEL
A3COMACSCOM
A3COMAVCOM
VH0
VH1
VH20
VH47
VH63
VH95
VH127
VH191
VH255
VL0
VL1
VL20
VL47
VL63
VL95
VL127
VL191
VL255
TO LCDCONT
OEM_INV
OEM
TO MICOM
COM_BIAS
PANEL_POW
GRAY_LEVEL
VLS_BIAS
DAC1_CS1
DAC2_CS1
MP_CLK5V
MP_DA5V
IC4108
PQ1CZ41H
VOLTAGE REGULATORS
IC4109
LT1615ES
DC/DC CONVERTER
IC4114
LT1617ES
DC/DC CONVERTER
IC4116
LTC1872
DC/DC CONVERTER
IC4101
IXA706WJ
GRAYLEVEL OPAMP
IC4102
NJM4580V
OP AMP
IC4107
LP2951CM
VOLTAGE REGULATORS
Q4101
2SD1664Q
Q4112
2SB1132Q
Q4103
2SA1530AR
Q4104
2SC3928AR
Q4105
TP0610T
Q4106
2SC3928AR
Q4108
2SK1826
FET
Q4109
2SK1826
FET
Q4110
SI4884DY
FET
DA221
D4110
TO PANEL
VGH
VGL
VLS+15V
LCD_CONT UNIT 6/7
DUNTKC793DE01
(PWBXC793WJ)
H
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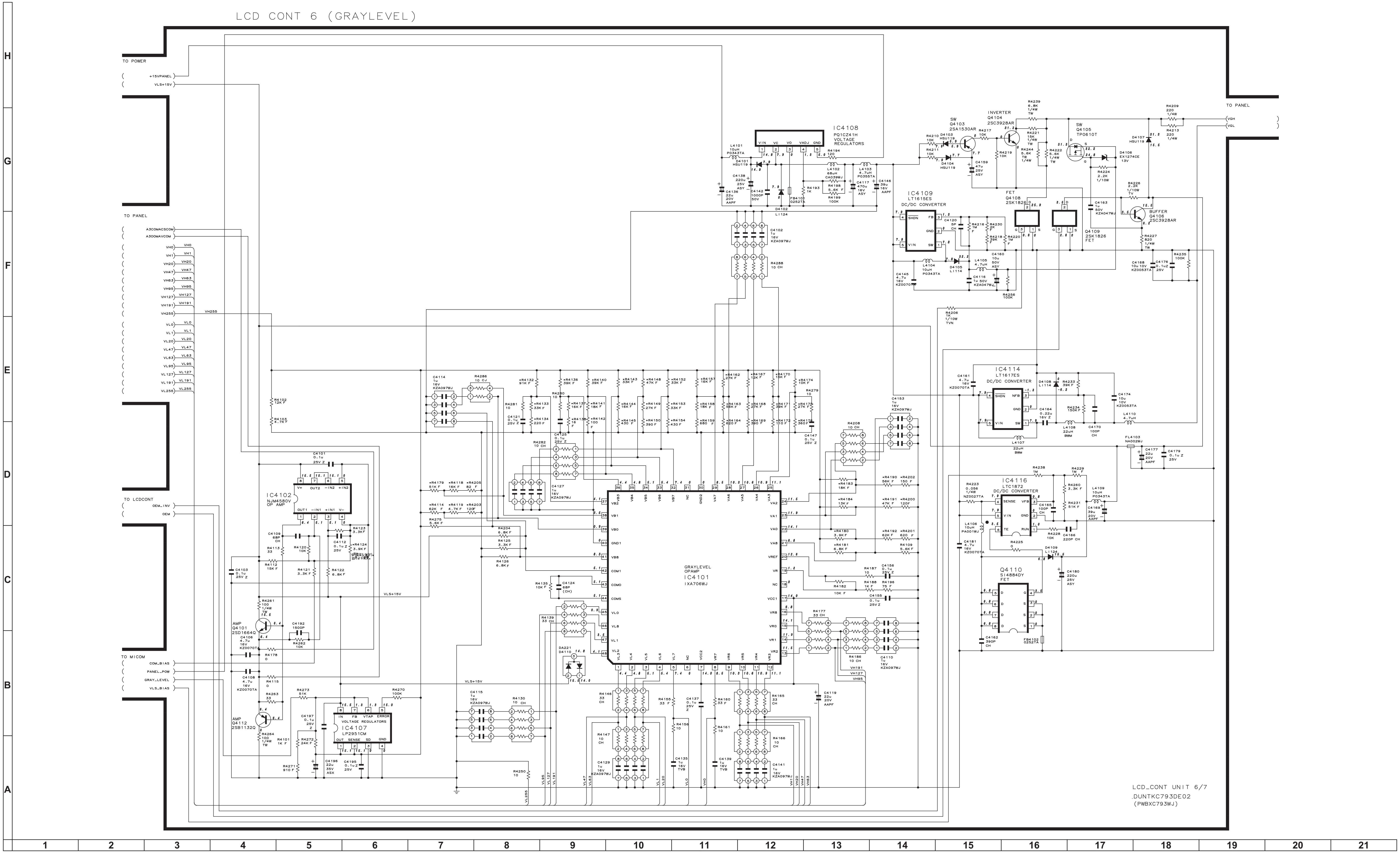
■LCD CONTROL Unit-6/7 (LC-32GA5U)


LCD CONT 6 (GRAYLEVEL)
TO POWER
+15VPANEL
VLS+15V
TO PANEL
A3COMACSCOM
A3COMAVCOM
VH0
VH1
VH20
VH47
VH63
VH95
VH127
VH191
VH255
VL0
VL1
VL20
VL47
VL63
VL95
VL127
VL191
VL255
TO LCDCONT
OEM_INV
OEM
TO MICOM
COM_BIAS
PANEL_POW
GRAY_LEVEL
VLS_BIAS
IC4108
PQ1CZ41H
VOLTAGE REGULATORS
IC4109
LT1615ES
DC/DC CONVERTER
SW Q4103 2SA1530AR
INVERTER Q4104 2SC3928AR
SW Q4105 TP0610T
FET Q4108 2SK1826
Q4109 2SK1826 FET
BUFFER Q4106 2SC3928AR
TO PANEL
VGH
VGL
IC4114
LT1617ES
DC/DC CONVERTER
IC4116
LTC1872
DC/DC CONVERTER
Q4110
SI4884DY
FET
IC4102
NJM4580V
OP AMP
GRAYLEVEL
OPAMP
IC4101
IXA706WJ
AMP Q4101 2SD1664Q
AMP Q4112 2SB1132Q
IC4107
LP2951CM
VOLTAGE REGULATORS
VLS+15V
LCD_CONT UNIT 6/7
DUNTKC793DE02
(PWBXC793WJ)
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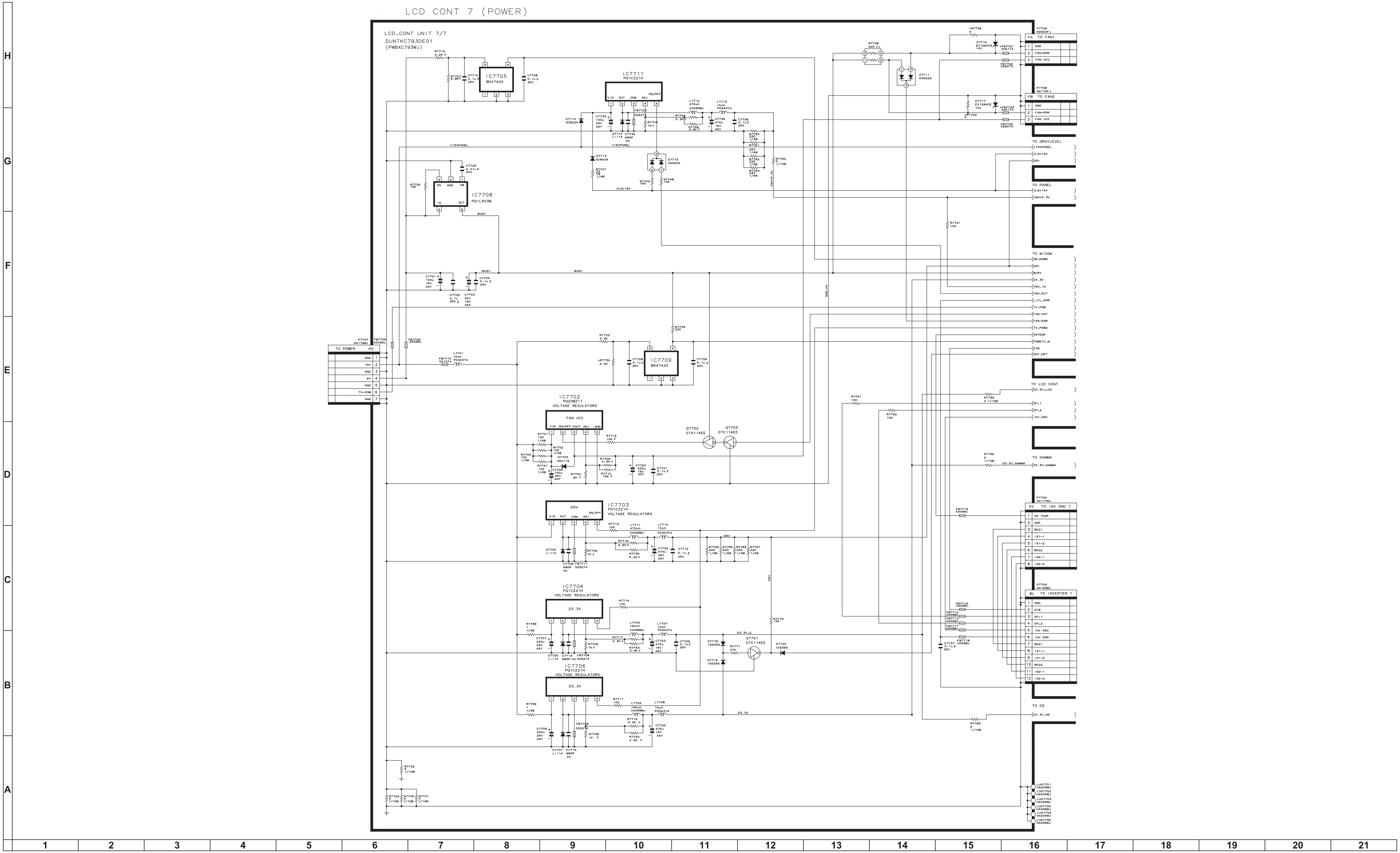
D65 D66

■LCD CONTROL Unit-7/7


LCD CONT 7 (POWER)
LCD_CONT UNIT 7/7
DUNTKC793DE01
(PWBXC793WJ)
IC7705
BD4742G
IC7711
PQ1CZ21H
IC7708
PQ1L503M
IC7709
BD4742G
IC7702
PQ20WZ11
VOLTAGE REGULATORS
FAN VCC
IC7703
PQ1CZ21H
VOLTAGE REGULATORS
D5V
IC7704
PQ1CZ21H
VOLTAGE REGULATORS
D3.3V
IC7706
PQ1CZ21H
VOLTAGE REGULATORS
D3.3V
Q7702
DTA114EE
Q7703
DTC114EE
Q7701
DTC114EE
P7707
NA176WJ
TO POWER
PQ
GND
15V
GND
6V
GND
TV-POW
GND
+15VPANEL
BU5V
VLS+15V
VSH+3.3V
D5V
D3.3V_2
D3.3V
P7708
N0540FJ
FA TO FAN1
GND
FAN-ERR
FAN VCC
P7708
N0175FJ
FB TO FAN2
GND
FAN-ERR
FAN VCC
D7711
DAN222
D7716
EX1284CE
D7717
EX1284CE
TO GRAYLEVEL
+15VPANEL
VLS+15V
D5V
TO PANEL
VLS+15V
VSH+3.3V
TO MICOM
SR-DOWN
D5V
BU5V
D3.3V
VSH_IN
VSH_OUT
L_FL_ERR
TV_POW
FAN-CNT
FAN-ERR
TV_POW2
OSTEMP
PONDTC_M
STB
SHT_DET
TO LCD CONT
D3.3V_LCD
OFL1
OFL2
INV_OSC
TO GAMMA
D3.3V_GAMMA
P7704
NA177WJ
GV TO INV GND 1
OS TEMP
GND
REG1
IS1-1
IS1-2
REG2
IS2-1
IS2-2
P7705
NA168WJ
BL TO INVERTER 1
GND
STB
OFL1
OFL2
INV OSC
INV ERR
REG1
IS1-1
IS1-2
REG2
IS2-1
IS2-2
TO OS
D3.3V_OS
H
G
F
E
D
C
B
A
1
2
3
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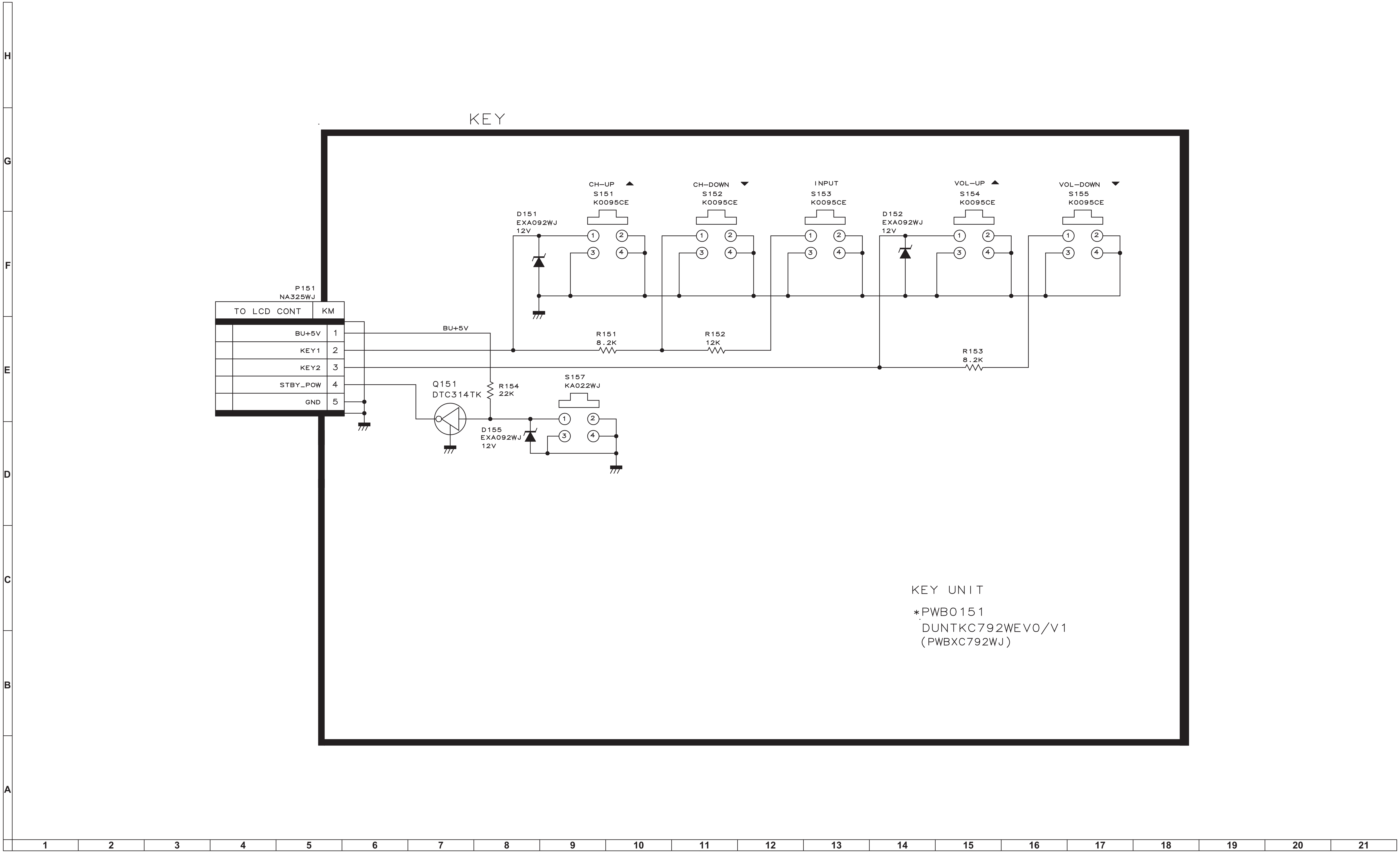
21

■KEY Unit


KEY
CH–UP ▲
S151
K0095CE
CH–DOWN ▼
S152
K0095CE
INPUT
S153
K0095CE
VOL–UP ▲
S154
K0095CE
VOL–DOWN ▼
S155
K0095CE
D151
EXA092WJ
12V
D152
EXA092WJ
12V
P151
NA325WJ
TO LCD CONT
KM
BU+5V 1
KEY1 2
KEY2 3
STBY_POW 4
GND 5
BU+5V
R151
8.2K
R152
12K
R153
8.2K
Q151
DTC314TK
R154
22K
S157
KA022WJ
D155
EXA092WJ
12V
1
2
3
4
KEY UNIT
*PWB0151
DUNTKC792WEV0/V1
(PWBXC792WJ)
H
G
F
E
D
C
B
A
1
2
3
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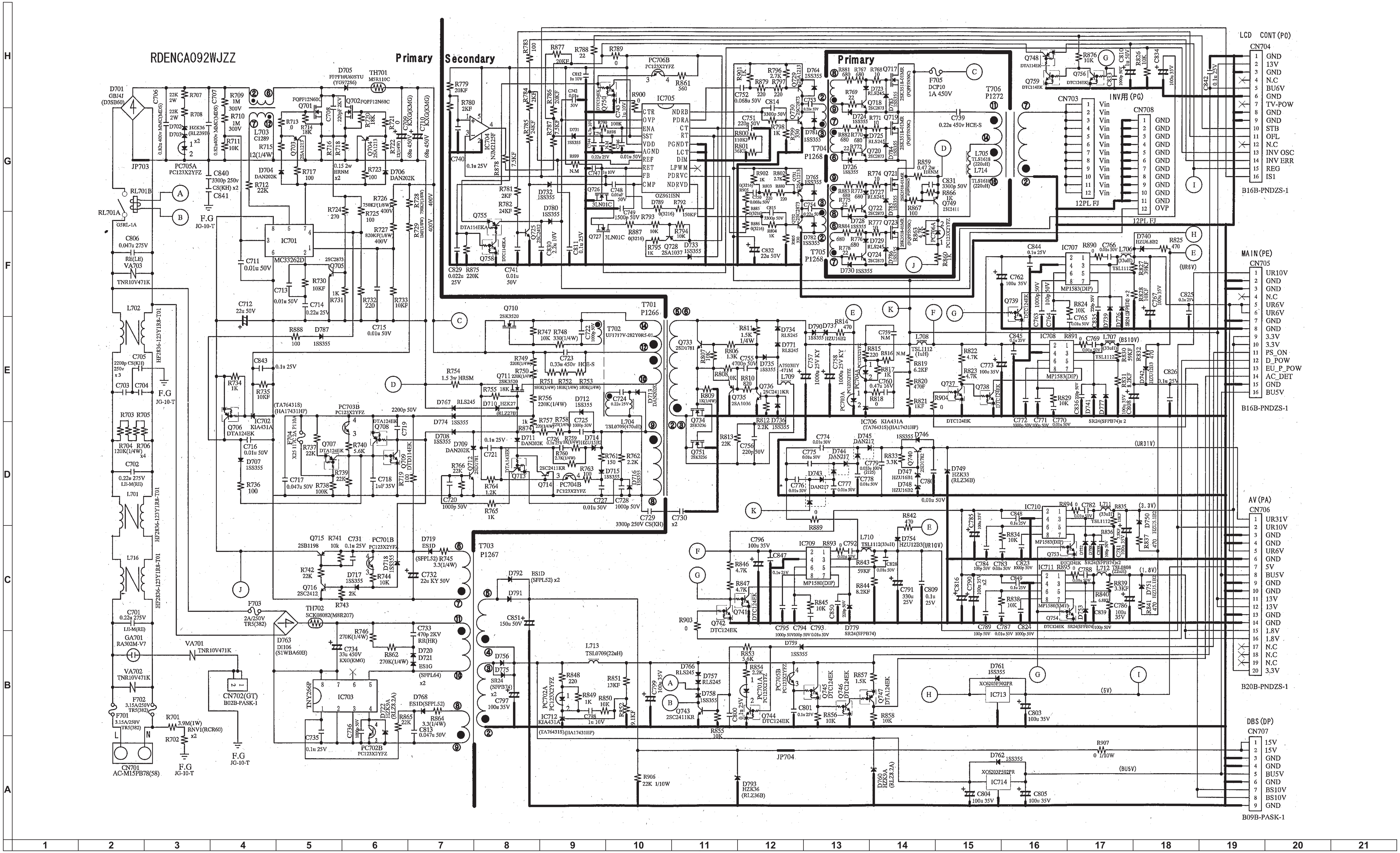
21

■POWER Unit (LC-26GA5U)

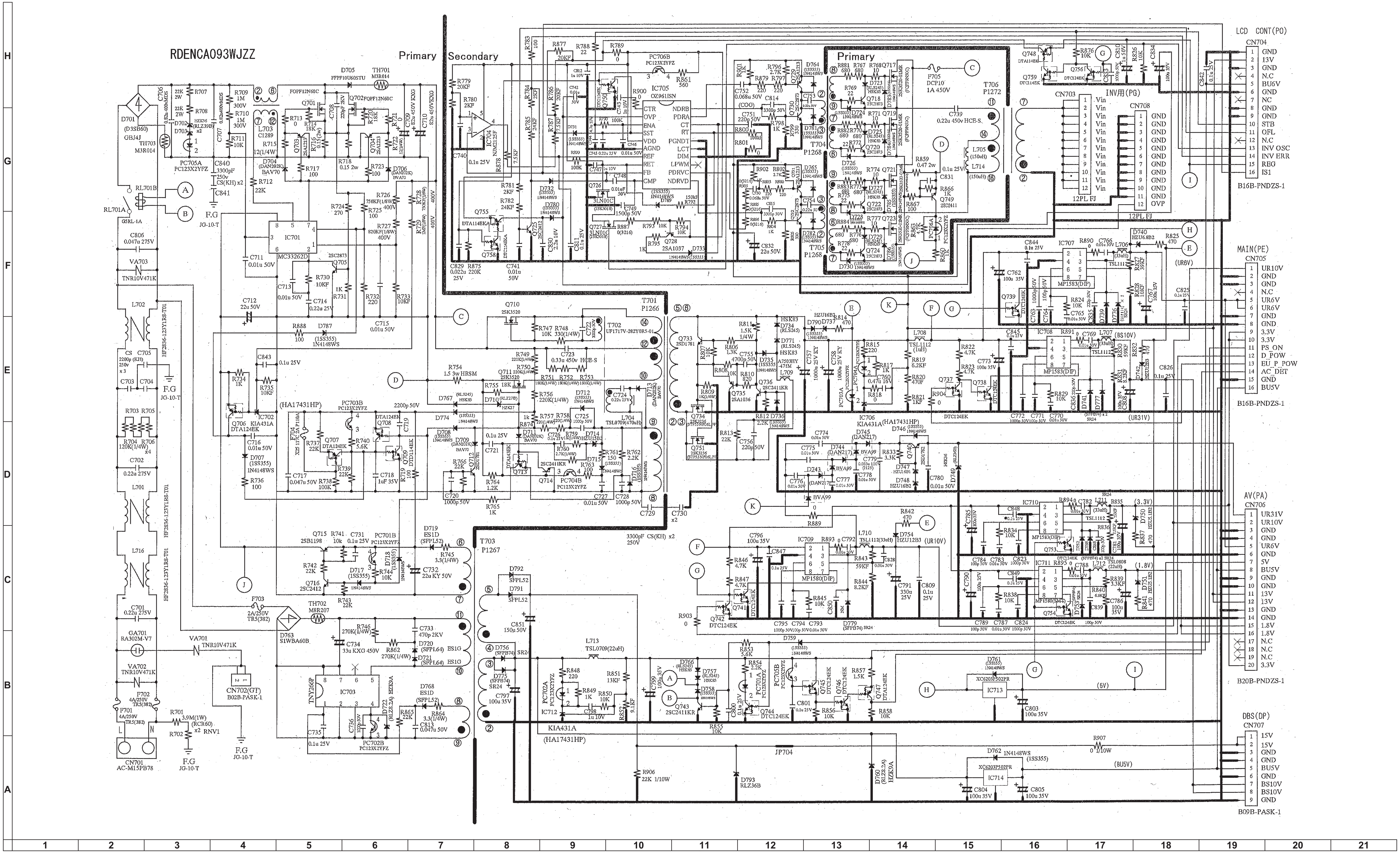


RDENCA092WJZZ
Primary
Secondary
Primary
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
D701 GBJ4J (D3SB60)
JP703
RL701B
RL701A G5RL-1A
C806 0.047u 275V RE(LE)
VA703 TNR10V471K
L702 HF2836-123Y1R8-T01
C705 2200p CS(KH) 250v x3
C703
C704
F.G JG-10-T
R703
R705
R704 120K(1/4W)
R706 x4
C702 0.22u 275V LE-M(RE)
L701 HF2836-123Y1R8-T01
L716 HF2836-123Y1R8-T01
C701 0.22u 275V LE-M(RE)
GA701 RA302M-V7
VA701 TNR10V471K
VA702 TNR10V471K
F702 3.15A/250V TR5(382)
F701 3.15A/250V TR5(382)
R701 3.9M(1W)
R702 RNV1(RCR60) x2
CN701 AC-M15PB78(58)
L
N
CN702(GT) B02B-PASK-1
F703 2A/250V TR5(382)
D763 DI106 (S1WBA60B)
TH702 SCK08082(M8R207)
IC701 MC33262D
IC702 KIA431A
IC703 TNY266P
PC705A PC123X2YFZ
PC703B PC123X2YFZ
PC701B PC123X2YFZ
PC702B PC123X2YFZ
D705 FFPF10U60STU (YG972S6)
TH701 M5R110C
Q701 FQPF12N60C
Q702 FQPF12N60C
L703 C1289
T701 P1266
T702 UF1717V-282Y0R5-01
T703 P1267
T704 P1268
T705 P1268
T706 P1272
IC704 NJM2125F
IC705 OZ9611SN
PC706B PC123X2YFZ
F705 DCP10 1A 450V
C739 0.22u 450v HCE-S
L705 TLS1618 (220uH)
L714 TLS1618 (220uH)
IC706 KIA431A (TA76431S)(HA17431HP)
IC707 MP1583(DIP)
IC708 MP1583(DIP)
IC709 MP1580(DIP)
IC710 MP1583(DIP)
IC711 MP1580(SMF)
IC712 KIA431A (TA76431S)(HA17431HP)
IC713 XC6203P502PR
IC714 XC6203P502PR
L713 TSL0709(22uH)
JP704
LCD CONT(PO)
CN704
1 GND
2 13V
3 GND
4 N.C
5 BU6V
6 GND
7 TV-POW
8 GND
9 GND
10 STB
11 OFL
12 N.C
13 INV OSC
14 INV ERR
15 REG
16 IS1
B16B-PNDZS-1
INV用(PG)
CN703
1 Vin
2 Vin
3 Vin
4 Vin
5 Vin
6 Vin
7 Vin
8 Vin
9 Vin
10 Vin
11 Vin
12 Vin
12PL FJ
CN708
1 GND
2 GND
3 GND
4 GND
5 GND
6 GND
7 GND
8 GND
9 GND
10 GND
11 GND
12 OVP
12PL FJ
MAIN(PE)
CN705
1 UR10V
2 GND
3 GND
4 N.C
5 UR6V
6 UR6V
7 GND
8 GND
9 3.3V
10 3.3V
11 PS_ON
12 D_POW
13 EU_P_POW
14 AC_DET
15 GND
16 BU5V
B16B-PNDZS-1
AV(PA)
CN706
1 UR31V
2 UR10V
3 GND
4 GND
5 UR6V
6 GND
7 5V
8 BU5V
9 GND
10 GND
11 13V
12 13V
13 GND
14 GND
15 1.8V
16 1.8V
17 N.C
18 N.C
19 N.C
20 3.3V
B20B-PNDZS-1
DBS(DP)
CN707
1 15V
2 15V
3 GND
4 GND
5 BU5V
6 GND
7 BS10V
8 BS10V
9 GND
B09B-PASK-1
(UR6V)
(UR31V)
(BS10V)
(3.3V)
(1.8V)
(5V)
(BU5V)

D71

D72

■POWER Unit (LC-32GA5U)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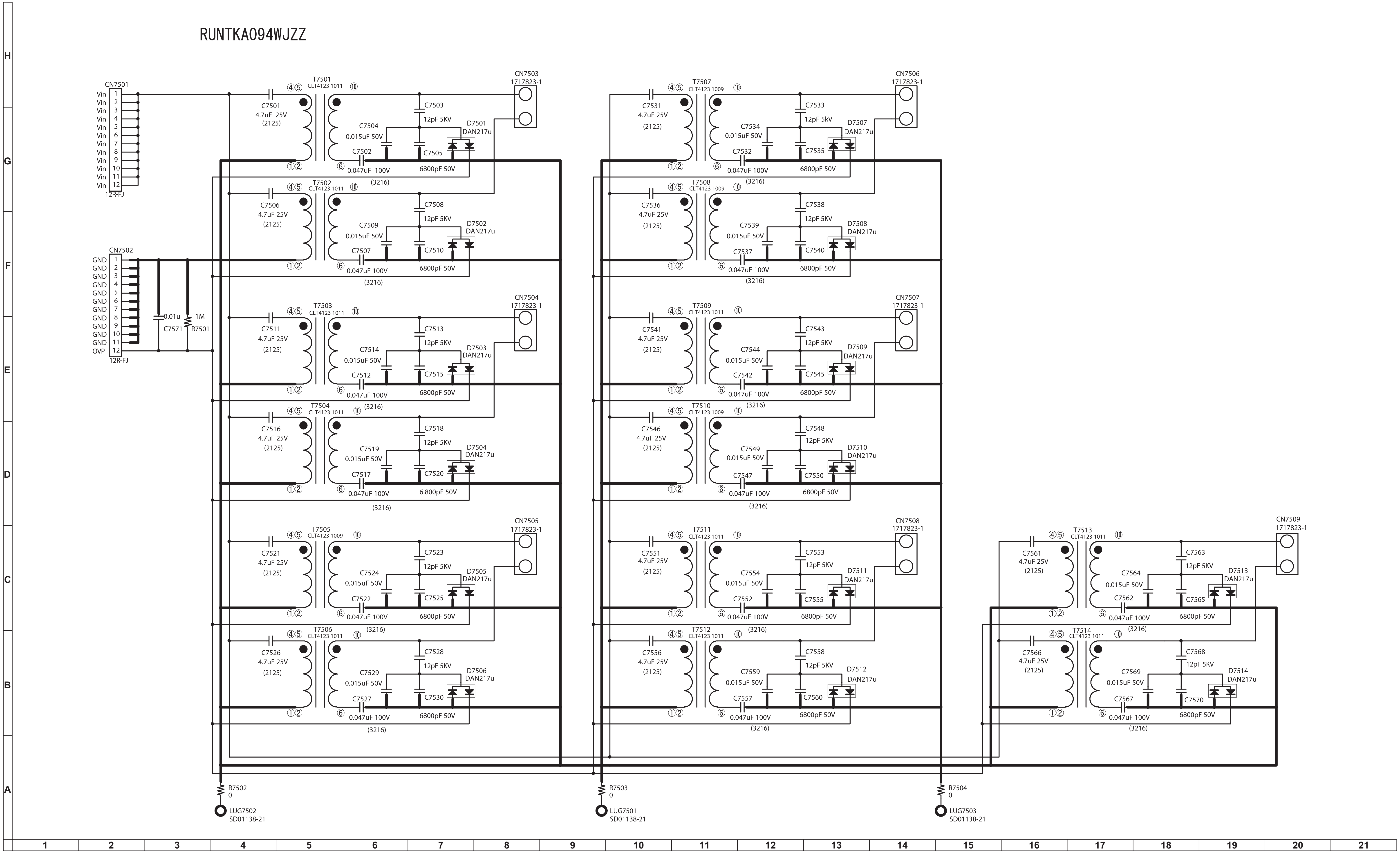
Primary
Secondary
Primary
D701 (D3SB60) GBJ4J
TH703 M3R014
PC705A PC123X2YFZ
RL701B
RL701A
G5RL-1A
C806 0.047u 275V
VA703 TNR10V471K
L702
L701
L716
CS 2200p (KH) 250v x 3
C703 C704 C705
F.G JG-10-T
R703 R705 R704 R706 120K(1/4W) x4
C702 0.22u 275V
C701 0.22u 275V
GA701 RA302M-V7
VA701 TNR10V471K
VA702 TNR10V471K
F702 4A/250V TR5(382)
F701 4A/250V TR5(382)
R701 3.9M(1W) (RCR60) x2 RNV1
R702
CN701 AC-M15PB78
CN702(GT) B02B-PASK-1
F703 2A/250V TR5(382)
D763 S1WBA60B
TH702 M8R207
IC701 MC33262D
IC702 KIA431A (HA17431HP)
IC703 TNY266P
IC704 NJM2125F
IC705 OZ9611SN
IC706 KIA431A (HA17431HP)
IC707 MP1583(DIP)
IC708 MP1583(DIP)
IC709 MP1580(DIP)
IC710 MP1583(DIP)
IC711 MP1580(SMD)
IC712 KIA431A (HA17431HP)
IC713 XC6203P502PR
IC714 XC6203P502PR
T701 P1266
T702 UF1717V-282Y0R5-01
T703 P1267
T704 P1268
T705 P1268
T706 P1272
F705 DCP10 1A 450V
D705 FFPF10U60STU
TH701 M3R014
JP704
LCD CONT(PO)
CN704
1 GND
2 13V
3 GND
4 N.C
5 BU6V
6 GND
7 NC
8 GND
9 GND
10 STB
11 OFL
12 N.C
13 INV OSC
14 INV ERR
15 REG
16 IS1
B16B-PNDZS-1
INV用(PG)
CN703
1-12 Vin
12PL FJ
CN708
1-11 GND
12 OVP
12PL FJ
MAIN(PE)
CN705
1 UR10V
2 GND
3 GND
4 N.C
5 UR6V
6 UR6V
7 GND
8 GND
9 3.3V
10 3.3V
11 PS_ON
12 D_POW
13 EU_P_POW
14 AC_DET
15 GND
16 BU5V
B16B-PNDZS-1
AV(PA)
CN706
1 UR31V
2 UR10V
3 GND
4 GND
5 UR6V
6 GND
7 5V
8 BU5V
9 GND
10 GND
11 13V
12 13V
13 GND
14 GND
15 1.8V
16 1.8V
17 N.C
18 N.C
19 N.C
20 3.3V
B20B-PNDZS-1
DBS(DP)
CN707
1 15V
2 15V
3 GND
4 GND
5 BU5V
6 GND
7 BS10V
8 BS10V
9 GND
B09B-PASK-1
(UR6V)
(UR31V)
(UR10V)
(3.3V)
(1.8V)
(5V)
(BU5V)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
H G F E D C B A

D73

D74

■INVERTER Unit (LC-26GA5U)

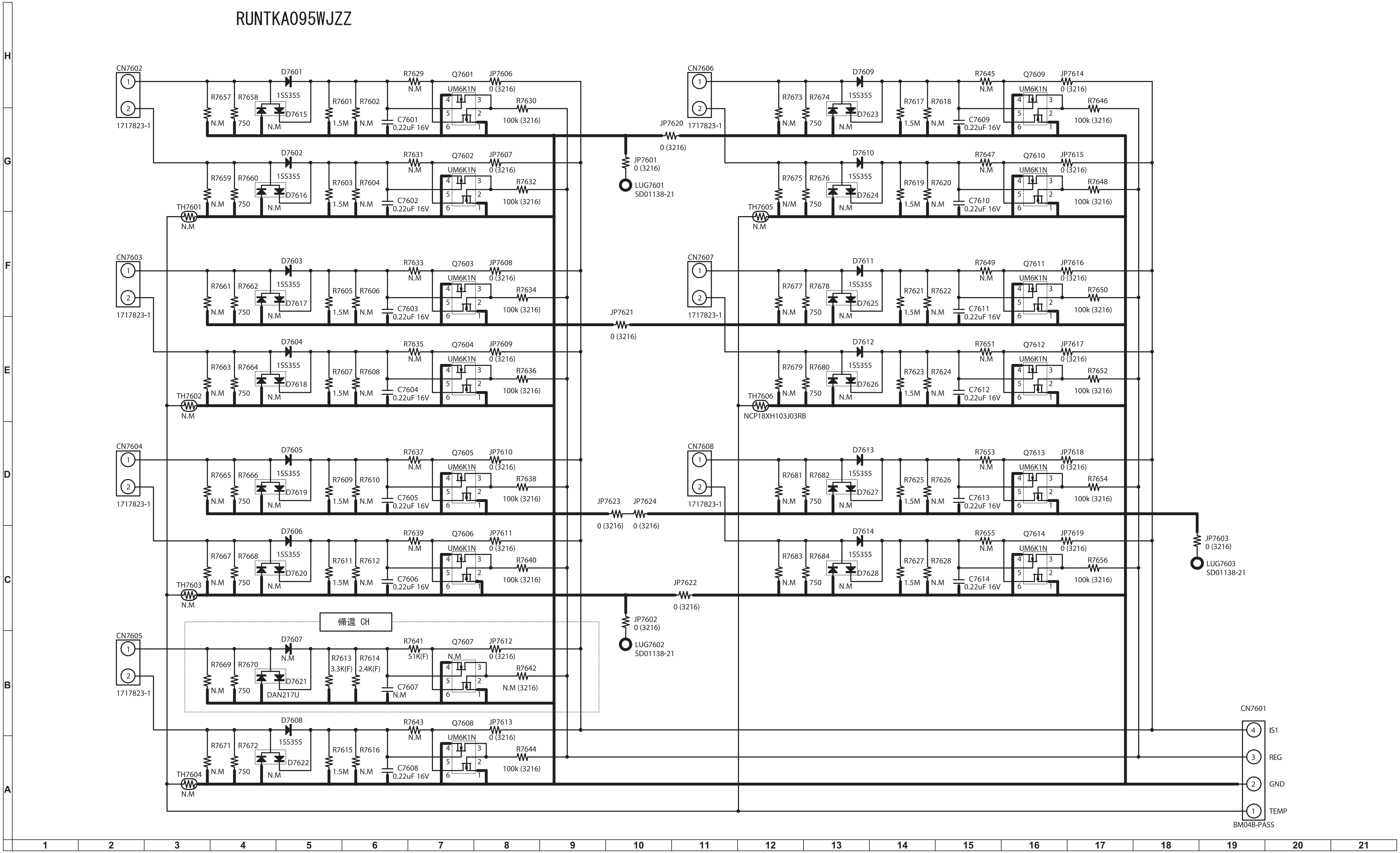

RUNTKA094WJZZ
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
CN7501
Vin 1
Vin 2
Vin 3
Vin 4
Vin 5
Vin 6
Vin 7
Vin 8
Vin 9
Vin 10
Vin 11
Vin 12
12R-FJ
CN7502
GND 1
GND 2
GND 3
GND 4
GND 5
GND 6
GND 7
GND 8
GND 9
GND 10
GND 11
OVP 12
12R-FJ
0.01u
C7571
1M
R7501
T7501 CLT4123 1011
T7502 CLT4123 1011
T7503 CLT4123 1011
T7504 CLT4123 1011
T7505 CLT4123 1009
T7506 CLT4123 1011
T7507 CLT4123 1009
T7508 CLT4123 1009
T7509 CLT4123 1011
T7510 CLT4123 1009
T7511 CLT4123 1011
T7512 CLT4123 1011
T7513 CLT4123 1011
T7514 CLT4123 1011
④⑤
⑩
①②
⑥
CN7503 1717823-1
CN7504 1717823-1
CN7505 1717823-1
CN7506 1717823-1
CN7507 1717823-1
CN7508 1717823-1
CN7509 1717823-1
C7501 4.7uF 25V (2125)
C7502 0.047uF 100V (3216)
C7503 12pF 5KV
C7504 0.015uF 50V
C7505 6800pF 50V
D7501 DAN217u
C7506 4.7uF 25V (2125)
C7507 0.047uF 100V (3216)
C7508 12pF 5KV
C7509 0.015uF 50V
C7510 6800pF 50V
D7502 DAN217u
C7511 4.7uF 25V (2125)
C7512 0.047uF 100V (3216)
C7513 12pF 5KV
C7514 0.015uF 50V
C7515 6800pF 50V
D7503 DAN217u
C7516 4.7uF 25V (2125)
C7517 0.047uF 100V (3216)
C7518 12pF 5KV
C7519 0.015uF 50V
C7520 6.800pF 50V
D7504 DAN217u
C7521 4.7uF 25V (2125)
C7522 0.047uF 100V (3216)
C7523 12pF 5KV
C7524 0.015uF 50V
C7525 6800pF 50V
D7505 DAN217u
C7526 4.7uF 25V (2125)
C7527 0.047uF 100V (3216)
C7528 12pF 5KV
C7529 0.015uF 50V
C7530 6800pF 50V
D7506 DAN217u
C7531 4.7uF 25V (2125)
C7532 0.047uF 100V (3216)
C7533 12pF 5kV
C7534 0.015uF 50V
C7535 6800pF 50V
D7507 DAN217u
C7536 4.7uF 25V (2125)
C7537 0.047uF 100V (3216)
C7538 12pF 5KV
C7539 0.015uF 50V
C7540 6800pF 50V
D7508 DAN217u
C7541 4.7uF 25V (2125)
C7542 0.047uF 100V (3216)
C7543 12pF 5KV
C7544 0.015uF 50V
C7545 6800pF 50V
D7509 DAN217u
C7546 4.7uF 25V (2125)
C7547 0.047uF 100V (3216)
C7548 12pF 5KV
C7549 0.015uF 50V
C7550 6800pF 50V
D7510 DAN217u
C7551 4.7uF 25V (2125)
C7552 0.047uF 100V (3216)
C7553 12pF 5KV
C7554 0.015uF 50V
C7555 6800pF 50V
D7511 DAN217u
C7556 4.7uF 25V (2125)
C7557 0.047uF 100V (3216)
C7558 12pF 5KV
C7559 0.015uF 50V
C7560 6800pF 50V
D7512 DAN217u
C7561 4.7uF 25V (2125)
C7562 0.047uF 100V (3216)
C7563 12pF 5KV
C7564 0.015uF 50V
C7565 6800pF 50V
D7513 DAN217u
C7566 4.7uF 25V (2125)
C7567 0.047uF 100V (3216)
C7568 12pF 5KV
C7569 0.015uF 50V
C7570 6800pF 50V
D7514 DAN217u
R7502 0
LUG7502 SD01138-21
R7503 0
LUG7501 SD01138-21
R7504 0
LUG7503 SD01138-21

D75

D76

■INVERTER GROUND Unit (LC-26GA5U)

RUNTKA095WJZZ



CN7602
1717823-1
CN7603
CN7604
CN7605
CN7606
CN7607
CN7608
D7601
D7602
D7603
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D7607
D7608
D7609
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D7611
D7612
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D7614
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D7621
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D7626
D7627
D7628
DAN217U
R7657
R7658
R7659
R7660
R7661
R7662
R7663
R7664
R7665
R7666
R7667
R7668
R7669
R7670
R7671
R7672
R7673
R7674
R7675
R7676
R7677
R7678
R7679
R7680
R7681
R7682
R7683
R7684
N.M
N/M
750
R7601
R7602
R7603
R7604
R7605
R7606
R7607
R7608
R7609
R7610
R7611
R7612
R7613
R7614
R7615
R7616
R7617
R7618
R7619
R7620
R7621
R7622
R7623
R7624
R7625
R7626
R7627
R7628
1.5M
3.3K(F)
2.4K(F)
C7601
C7602
C7603
C7604
C7605
C7606
C7607
C7608
C7609
C7610
C7611
C7612
C7613
C7614
0.22uF 16V
R7629
R7631
R7633
R7635
R7637
R7639
R7641
51K(F)
R7643
R7645
R7647
R7649
R7651
R7653
R7655
Q7601
Q7602
Q7603
Q7604
Q7605
Q7606
Q7607
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JP7616
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JP7618
JP7619
0 (3216)
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R7640
R7642
R7644
R7646
R7648
R7650
R7652
R7654
R7656
100k (3216)
N.M (3216)
TH7601
TH7602
TH7603
TH7604
TH7605
TH7606
NCP18XH103J03RB
帰還 CH
JP7620
JP7621
JP7622
JP7623
JP7624
JP7601
JP7602
JP7603
LUG7601
LUG7602
LUG7603
SD01138-21
CN7601
IS1
REG
GND
TEMP
BM04B-PASS
H
G
F
E
D
C
B
A
1
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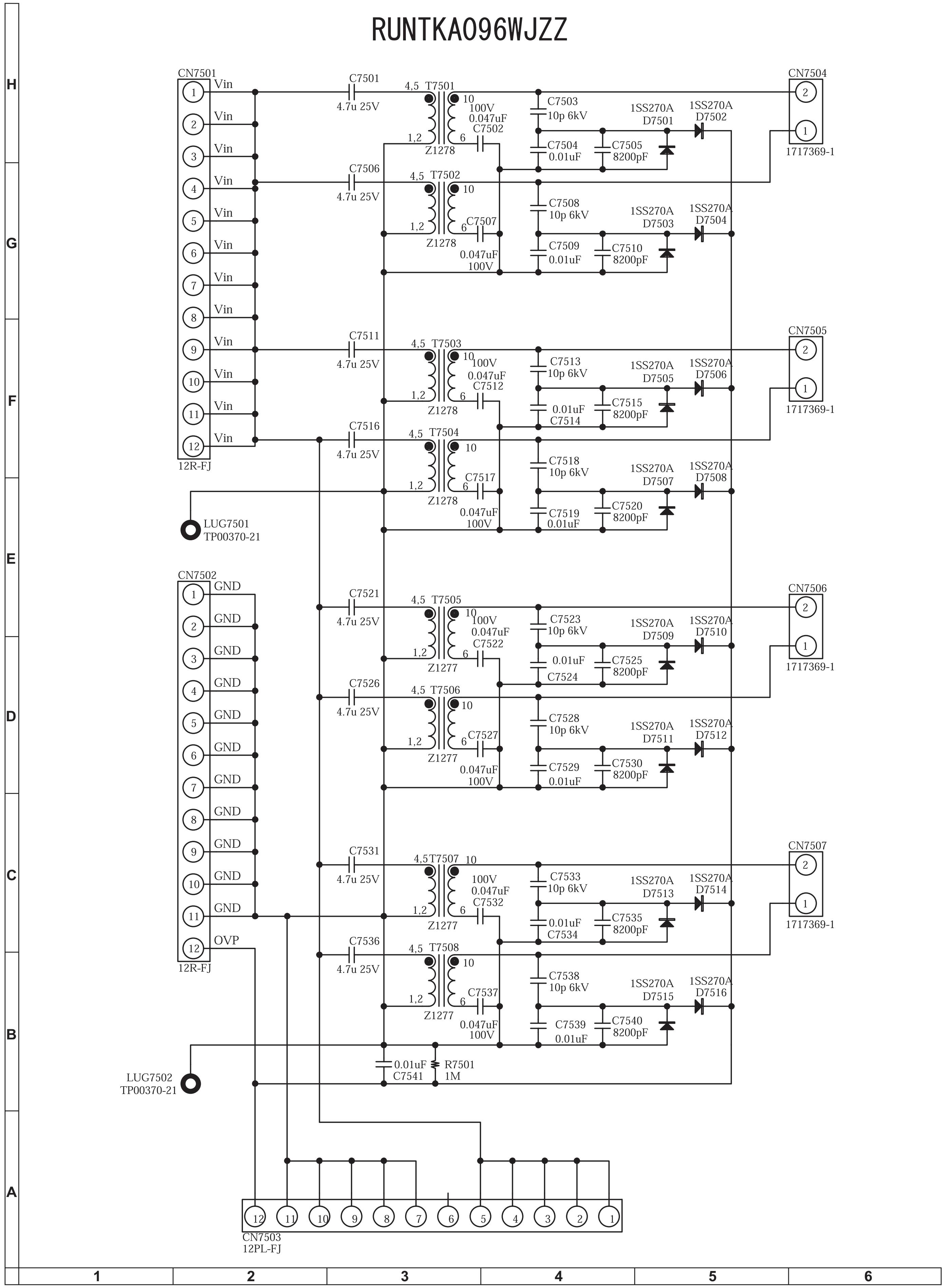
■INVERTER-1 Unit (LC-32GA5U)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Vin
12R-FJ
C7501
4.7u 25V
4.5 T7501
10
1,2
6
100V
0.047uF
C7502
Z1278
C7503
10p 6kV
C7504
0.01uF
C7505
8200pF
1SS270A
D7501
1SS270A
D7502
CN7504
1717369-1
C7506
4.5 T7502
C7507
C7508
C7509
C7510
D7503
D7504
C7511
4.5 T7503
C7512
C7513
C7514
C7515
D7505
D7506
CN7505
C7516
4.5 T7504
C7517
C7518
C7519
C7520
D7507
D7508
LUG7501
TP00370-21
CN7502
GND
OVP
C7521
4.5 T7505
Z1277
C7522
C7523
C7524
C7525
D7509
D7510
CN7506
C7526
4.5 T7506
C7527
C7528
C7529
C7530
D7511
D7512
C7531
4.5T7507
C7532
C7533
C7534
C7535
D7513
D7514
CN7507
C7536
4.5 T7508
C7537
C7538
C7539
C7540
D7515
D7516
0.01uF
C7541
R7501
1M
LUG7502
TP00370-21
CN7503
12PL-FJ
1
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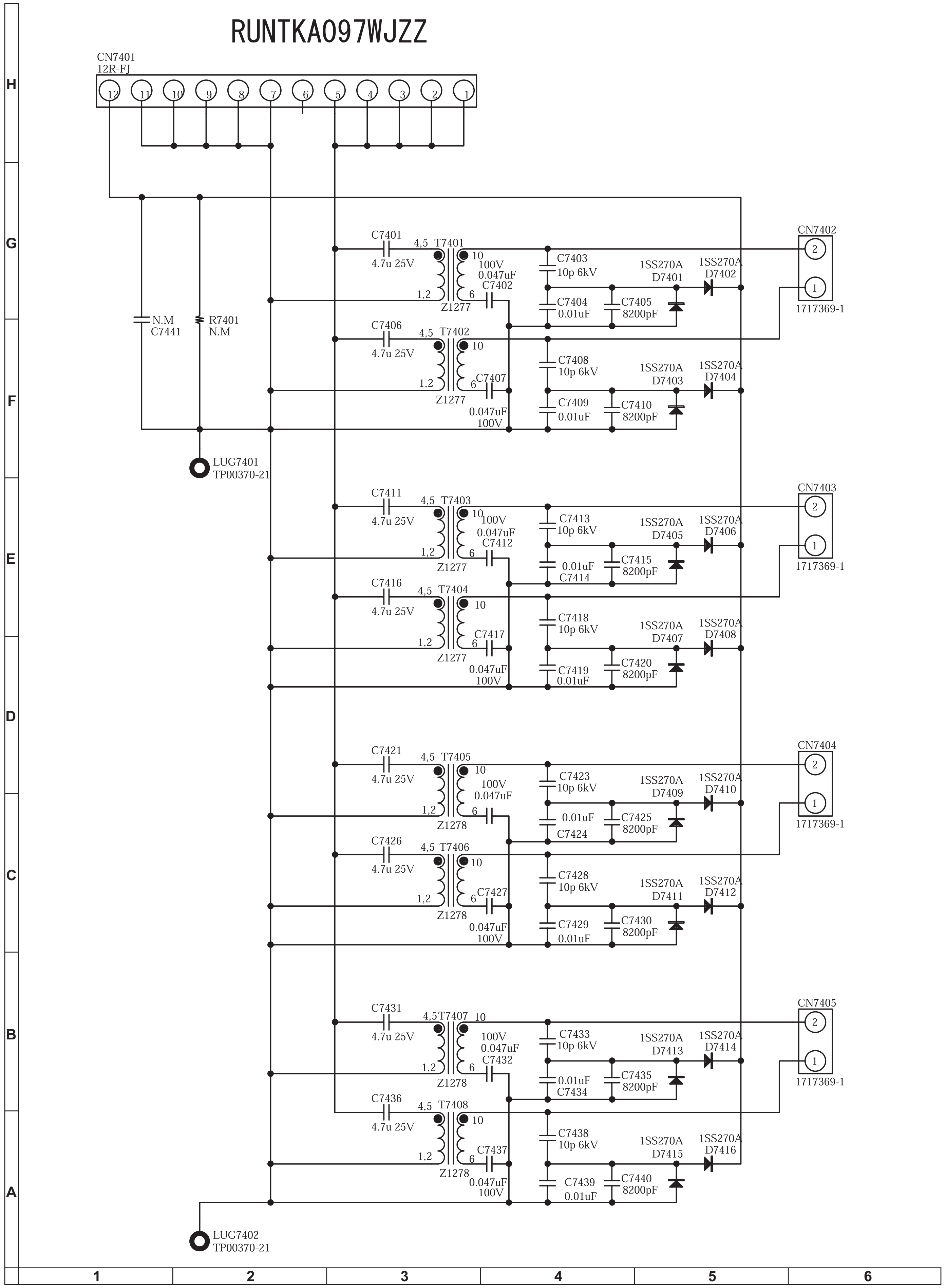
5
6
H
G
F
E
D
C
B
A

■INVERTER-2 Unit (LC-32GA5U)


RUNTKA097WJZZ
CN7401
12R-FJ
N.M
C7441
R7401
N.M
LUG7401
TP00370-21
C7401
4.7u 25V
4.5 T7401
10
1,2
6
100V
0.047uF
C7402
Z1277
C7403
10p 6kV
C7404
0.01uF
C7405
8200pF
1SS270A
D7401
1SS270A
D7402
CN7402
1717369-1
C7406
4.5 T7402
C7407
C7408
C7409
C7410
D7403
D7404
C7411
4.5 T7403
C7412
C7413
C7414
C7415
D7405
D7406
CN7403
C7416
4.5 T7404
C7417
C7418
C7419
C7420
D7407
D7408
C7421
4.5 T7405
Z1278
C7423
C7424
C7425
D7409
D7410
CN7404
C7426
4.5 T7406
C7427
C7428
C7429
C7430
D7411
D7412
C7431
4.5T7407
C7432
C7433
C7434
C7435
D7413
D7414
CN7405
C7436
4.5 T7408
C7437
C7438
C7439
C7440
D7415
D7416
LUG7402
TP00370-21
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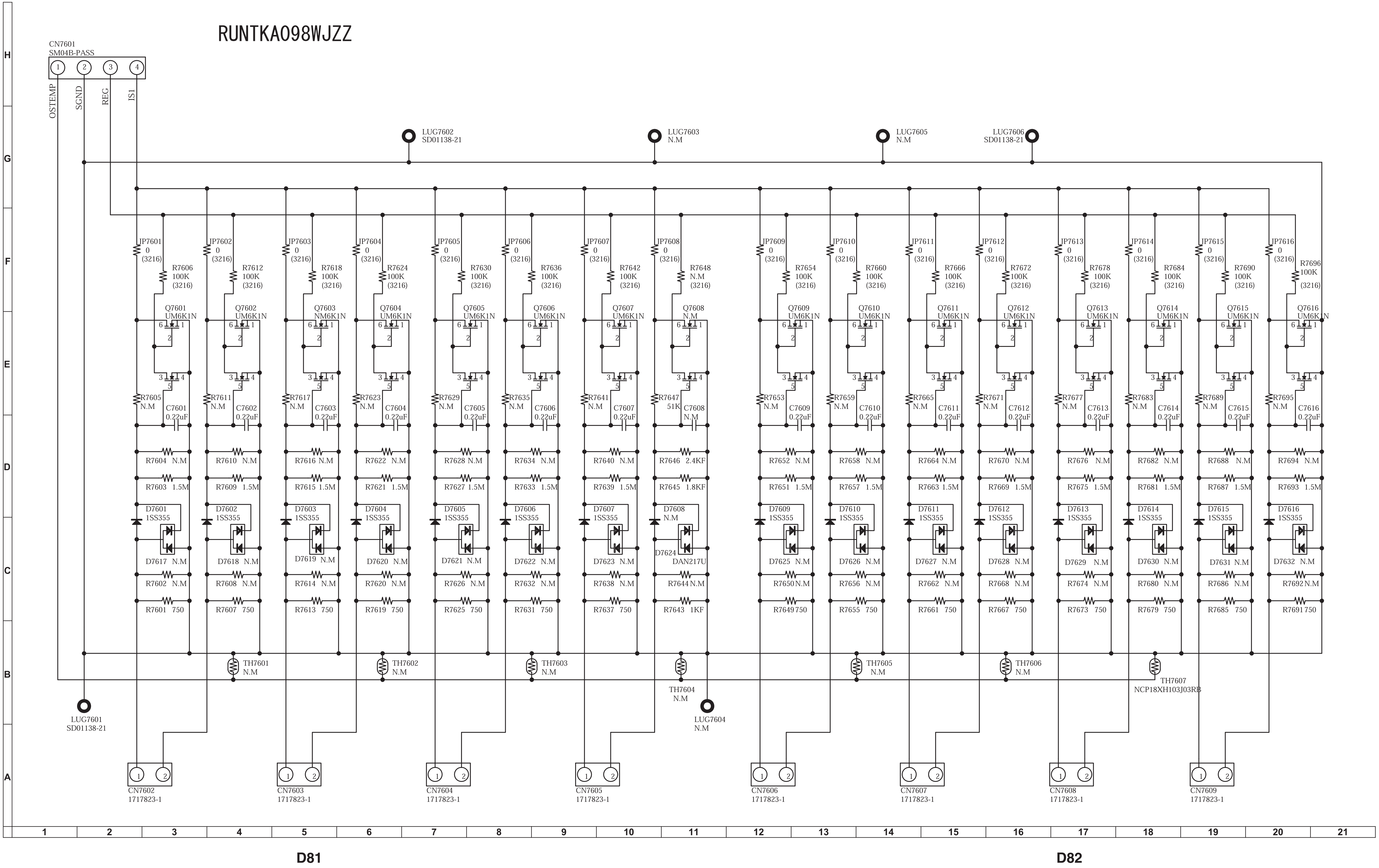
■INVERTER GROUND Unit (LC-32GA5U)


RUNTKA098WJZZ
CN7601
SM04B-PASS
1
2
3
4
OSTEMP
SGND
REG
IS1
LUG7602
SD01138-21
LUG7603
N.M
LUG7605
N.M
LUG7606
SD01138-21
JP7601 0 (3216)
R7606 100K (3216)
Q7601 UM6K1N
R7605 N.M
C7601 0.22uF
R7604 N.M
R7603 1.5M
D7601 1SS355
D7617 N.M
R7602 N.M
R7601 750
JP7602 0 (3216)
R7612 100K (3216)
Q7602 UM6K1N
R7611 N.M
C7602 0.22uF
R7610 N.M
R7609 1.5M
D7602 1SS355
D7618 N.M
R7608 N.M
R7607 750
JP7603 0 (3216)
R7618 100K (3216)
Q7603 NM6K1N
R7617 N.M
C7603 0.22uF
R7616 N.M
R7615 1.5M
D7603 1SS355
D7619 N.M
R7614 N.M
R7613 750
JP7604 0 (3216)
R7624 100K (3216)
Q7604 UM6K1N
R7623 N.M
C7604 0.22uF
R7622 N.M
R7621 1.5M
D7604 1SS355
D7620 N.M
R7620 N.M
R7619 750
JP7605 0 (3216)
R7630 100K (3216)
Q7605 UM6K1N
R7629 N.M
C7605 0.22uF
R7628 N.M
R7627 1.5M
D7605 1SS355
D7621 N.M
R7626 N.M
R7625 750
JP7606 0 (3216)
R7636 100K (3216)
Q7606 UM6K1N
R7635 N.M
C7606 0.22uF
R7634 N.M
R7633 1.5M
D7606 1SS355
D7622 N.M
R7632 N.M
R7631 750
JP7607 0 (3216)
R7642 100K (3216)
Q7607 UM6K1N
R7641 N.M
C7607 0.22uF
R7640 N.M
R7639 1.5M
D7607 1SS355
D7623 N.M
R7638 N.M
R7637 750
JP7608 0 (3216)
R7648 N.M (3216)
Q7608 N.M
R7647 51K
C7608 N.M
R7646 2.4KF
R7645 1.8KF
D7608 N.M
D7624 DAN217U
R7644 N.M
R7643 1KF
JP7609 0 (3216)
R7654 100K (3216)
Q7609 UM6K1N
R7653 N.M
C7609 0.22uF
R7652 N.M
R7651 1.5M
D7609 1SS355
D7625 N.M
R7650 N.M
R7649 750
JP7610 0 (3216)
R7660 100K (3216)
Q7610 UM6K1N
R7659 N.M
C7610 0.22uF
R7658 N.M
R7657 1.5M
D7610 1SS355
D7626 N.M
R7656 N.M
R7655 750
JP7611 0 (3216)
R7666 100K (3216)
Q7611 UM6K1N
R7665 N.M
C7611 0.22uF
R7664 N.M
R7663 1.5M
D7611 1SS355
D7627 N.M
R7662 N.M
R7661 750
JP7612 0 (3216)
R7672 100K (3216)
Q7612 UM6K1N
R7671 N.M
C7612 0.22uF
R7670 N.M
R7669 1.5M
D7612 1SS355
D7628 N.M
R7668 N.M
R7667 750
JP7613 0 (3216)
R7678 100K (3216)
Q7613 UM6K1N
R7677 N.M
C7613 0.22uF
R7676 N.M
R7675 1.5M
D7613 1SS355
D7629 N.M
R7674 N.M
R7673 750
JP7614 0 (3216)
R7684 100K (3216)
Q7614 UM6K1N
R7683 N.M
C7614 0.22uF
R7682 N.M
R7681 1.5M
D7614 1SS355
D7630 N.M
R7680 N.M
R7679 750
JP7615 0 (3216)
R7690 100K (3216)
Q7615 UM6K1N
R7689 N.M
C7615 0.22uF
R7688 N.M
R7687 1.5M
D7615 1SS355
D7631 N.M
R7686 N.M
R7685 750
JP7616 0 (3216)
R7696 100K (3216)
Q7616 UM6K1N
R7695 N.M
C7616 0.22uF
R7694 N.M
R7693 1.5M
D7616 1SS355
D7632 N.M
R7692 N.M
R7691 750
TH7601 N.M
TH7602 N.M
TH7603 N.M
TH7604 N.M
TH7605 N.M
TH7606 N.M
TH7607 NCP18XH103J03RB
LUG7601
SD01138-21
LUG7604
N.M
CN7602 1717823-1
CN7603 1717823-1
CN7604 1717823-1
CN7605 1717823-1
CN7606 1717823-1
CN7607 1717823-1
CN7608 1717823-1
CN7609 1717823-1
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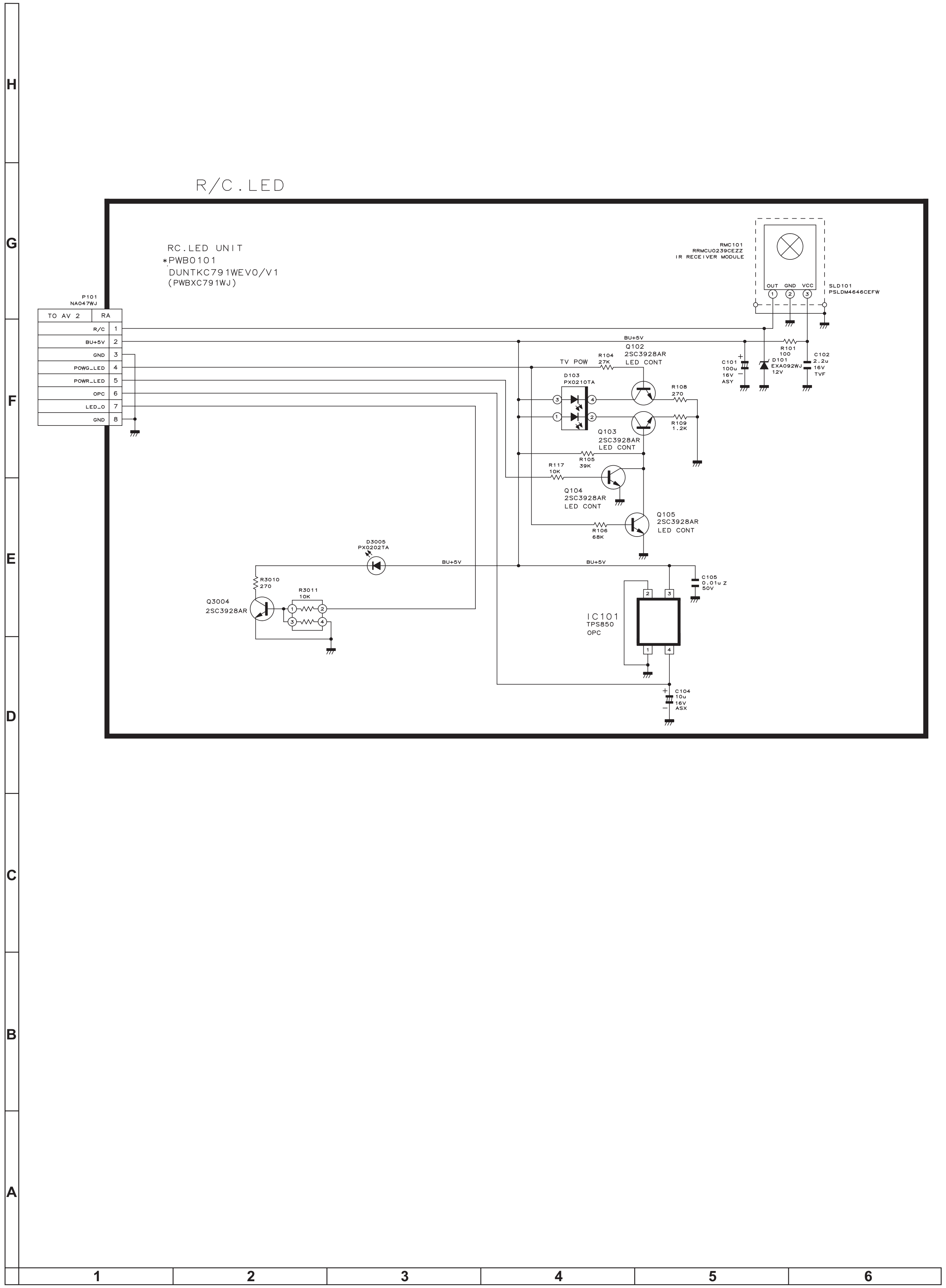
D82

■R/C, LED Unit


R/C.LED
RC.LED UNIT
*PWB0101
DUNTKC791WEV0/V1
(PWBXC791WJ)
P101
NA047WJ
TO AV 2
RA
R/C 1
BU+5V 2
GND 3
POWG_LED 4
POWR_LED 5
OPC 6
LED_O 7
GND 8
RMC101
RRMCU0239CEZZ
IR RECEIVER MODULE
OUT GND VCC
SLD101
PSLDM4646CEFW
BU+5V
R101
100
C101
100u
16V
ASY
D101
EXA092WJ
12V
C102
2.2u
16V
TVF
TV POW
R104
27K
Q102
2SC3928AR
LED CONT
D103
PX0210TA
R108
270
R109
1.2K
Q103
2SC3928AR
LED CONT
R105
39K
R117
10K
Q104
2SC3928AR
LED CONT
Q105
2SC3928AR
LED CONT
R106
68K
D3005
PX0202TA
BU+5V
BU+5V
R3010
270
R3011
10K
Q3004
2SC3928AR
C105
0.01u Z
50V
IC101
TPS850
OPC
C104
10u
16V
ASX
H
G
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